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EDITORIAL

This issue completes the second volume of the Macdonald College Magazine and when we look back through the pages of past numbers, surely we can realize that although much has been done much remains undone. We stand

aloof in many respects from similar journals published by sister colleges. In the first place, this magazine has not yet reached full development in point of age. The College itself has only been in existence five years, during the last three

of which we have been able to maintain a magazine at a standard not excelled by any of our contemporaries, and this has been accomplished in spite of the fact that the number of students is not as large as at other agricultural colleges older than our own. In the second place this magazine representing as it does the work of three schools must have a very far-reaching effect. It meets the needs of our rural districts admirably, for the farmer, in addition to obtaining a knowledge of the vital problems of agriculture, must also have problems in the home managed according to economical, labour-saving and hygienic methods, and, besides, he has to see that the rising generation is educated. For these reasons, then, it is quite evident that the Macdonald College Magazine should have a place in every farm home in the Province of Quebec, at least. We are not saying this because, as some narrow minded people might think we only want to increase our circulation, but we are confident that in publishing a magazine of this nature we are filling a want which it would be impossible to fill through any other medium. Let us therefore, as students of this great institution, which represents we might say the tripod on which rural life rests, do something to further its good work. Our graduates are going forth armed with degrees and diplomas to enlighten the world. Where did they get these weapons? From the classrooms of Macdonald, of course. Undoubtedly this is quite true, but at the same time we have no hesitation in saying that the classroom is not the only place for acquiring knowledge. Graduates, remember your college organizations, they have helped to make you man and woman. The College Magazine, standing as it does for unity among the student body, and as the only one

common organ of the three schools, is the most important of your college organizations. This is the one that will keep you in touch with your Alma Mater; this, besides, is the one that can do good to the country at large. Will you forget it? Do not say you have done your share when you have haughtily put your hand into your purse and pulled out a subscription. This is not all the magazine asks of you, nor is it all you can do without any trouble. If this magazine has justified its existence, as it certainly has, it demands that you should not only subscribe to it yourself, but induce as many others as possible to do so, bearing in mind the great place it can fill in the rural home.

* * *

The subject of agricultural co-operation has been so much written on and discussed that it might seem pretentious on our part to attempt any comments on it in these columns. Likewise many phases of extension work have also been treated to a greater or less extent. It is therefore, not our intention to go into subjects such as these in this short space, but we rather wish to bring out a few points on agricultural education with which such problems are closely connected.

In any sphere of work we might happen to fall, we soon realize that to make it a success we must know how. The "knowing how" then is Education; that is, before much can be achieved in any line we must be taught something about that line. Among the great subjects bearing on rural conditions before us to-day, we know of no others in which more education is needed than the two referred to above, namely Co-operation and Extension Work. These are being cited as two of the most important, but the list as we all know is a long one.

The question is, can our agricultural colleges adequately meet the demands that are being made on them for education in these and other lines? They have a great task before them. Day after day fresh problems seem to loom up on which some education is demanded and from which the agricultural college cannot turn. We often wonder, and justly so, what the scope of an agricultural college is. It would be impossible, we think, to express this correctly. People do not seem to realize that a graduate of an agricultural college has been more widely educated than a graduate from any other college. Anyone who knows anything about it will bear out the truth of this statement. It would be useless to enumerate here the subjects in which instruction is given, suffice to say that every successful agriculturist is aware of the many forces he has to contend with in nature, and the measure of his success depends largely on the way he uses these forces. We fear, however, that like a willing horse, the agricultural college is becoming overloaded, and it does not receive the help it should from other educational institutions of more narrow scope. Sooner or later there must come some means whereby the normal schools of our country can be made to co-operate with the agricultural colleges. They could give through short courses instruction to teachers of rural schools regarding such things as the selection of seeds, the rearing of plants, study of insects, etc. Teachers in elementary rural schools could give training in nature study, manual training and household science. Then too the school garden would occupy a prominent place

whereby the pupil could gain a knowledge of a few of the fundamental principles underlying common farm practices. The consolidated rural schools would further this work. All these combined would create an appreciation for rural life and its opportunities. If all this were done, the agricultural college would be free to grapple with larger problems, and their work with the farmer would not consist to the extent it does now in handing out elementary knowledge, such as the way in which plants feed, the constituents required by them, the necessity for proper tillage, cultivation, etc.

* * *

While on the subject of agricultural education let us refer to the great opportunity afforded the students of Macdonald College when they were allowed to visit the "Better Farming Special" train run by the Canadian Pacific Railway and equipped by the Ontario Agricultural Department. This train when we saw it had just completed a three weeks' tour in Ontario, and although it bore signs of much usage it still brought home to us the value of being taught by sight and contact. In the short space of time allotted us we found ourselves inspecting the various specimens in every department, and at the same time kept the instructors busy with questions. The only way to properly acquire knowledge such as we want, is by demonstration, and we certainly want more demonstration farms and more demonstration trains. We understand that a train similarly equipped will be making a tour through the Province of Quebec this summer.

The Conservation of Soil Fertility.

By H. S. HAMMOND, B.S.A., F.C.S.



THE surface layer of soil, manufactured by the processes of nature through millions of years, is the most precious natural resource of the nation. Of all of our duties to our descendants, that of maintaining the soil unimpaired in thickness and in richness, is the most serious." (Van Hise, 'The Conservation of Natural Resources in the United States).'

By soil fertility is understood that combination of conditions which renders the soil capable of yielding remunerative crops. The more important of these conditions are moisture-holding power, drainage, aeration, tilth, bacterial life and plant food.

In this article the conservation of plant food only will be considered; nor will all the elements of plant food be dealt with, but only nitrogen, phosphorus and potassium, the three elements which form the valuable portion of most mixed fertilizers.

NITROGEN.

The ultimate source of nitrogen as plant-food is the atmosphere, which contains a boundless supply, since it consists of pure nitrogen to the extent of nearly four-fifths. But none of the agricultural plants, with the exception of one family, are able to utilize this free nitrogen. To be of use to plants such as grains, grasses and roots, this nitrogen must be combined with other elements in various compounds. Hence arises the necessity of maintaining the amount of these compounds in the soil, for not only are the great majority of plants unable to utilize the atmospheric nitrogen

in the soil, but their growth and removal depletes the soil of the combined nitrogen which there exists.

The family of plants referred to above, which can utilize free nitrogen, is the Leguminosæ, *i. e.* the alfalfas, clovers, peas and beans. Under favorable conditions these plants serve as hosts to bacteria, which live in little swellings on the roots, derive much of their food and energy from compounds formed by the host-plant and utilize some of this energy in causing the nitrogen in the soil-air to combine with other elements, the products thus formed being utilized by the host-plants and also by any other plants which may be growing with them.

These bacteria are often absent from soils which have not previously grown the leguminous crops; in such cases it is advisable to supply the bacteria, either by adding soil in which they are known to be present, or by means of a pure culture of the specific bacteria.

When the residue from a leguminous crop is ploughed under, the nitrogenous matter therein is returned to the soil to be utilized by succeeding crops, thus directly adding a nitrogenous fertilizer to the soil; when, in addition to this, the manure produced by feeding these leguminous crops to stock is carefully returned to the soil, the amount of nitrogenous matter added by the leguminous residue and this manure will be greater than that lost by the removal of the other crops in an ordinary four- or five-course rotation. These facts show the importance and necessity of including a leguminous crop in the rotation, in order to maintain the supply of nitrogenous plant-food in the soil.

Combined nitrogen is added to the soil whenever manure is applied, though it is a fact, proved by science, but not generally accepted in practice, that it is difficult to prevent the loss of at least one-third of this nitrogen between the stable and the field, unless the manure is applied fresh, a method which is not always feasible.

Nitrogenous matter may also be added to the soil in various fertilizers; but on

Already, in her eagerness for bones, she has turned up the battle-fields of Leipzig of Waterloo, and of the Crimea; already from the catacombs of Sicily she has carried away the skeletons of many successive generations. Annually she removes from the shores of other countries to her own the manurial equivalent of three millions and a half of men, whom she takes from us the means of supporting, and squanders down her sewers to



NODULES ON ROOTS OF ALFALFA FORMED BY NITROGEN GATHERING BACTERIA.

ordinary farms, the most economical way of maintaining the supply of nitrogenous matter is that which has been recommended above, a way which is adopted by the best farmers and which is slowly finding its way into the less progressive districts

PHOSPHORUS.

"England is robbing all other countries of the condition of their fertility.

the sea. Like a vampire, she clings upon the neck of Europe—nay, of the entire world—and sucks the heart-blood from nations without a thought of justice towards them, without a shadow of lasting advantage to herself."

This bitter tirade was uttered by Liebig, the father of Agricultural Chemistry, rather more than half a century ago, when bones were the only fertilizer except manure and compost, in common

use; and it must be admitted, in fairness to Liebig, before the vast deposits of mineral phosphates had been discovered.

Phosphorus, unlike nitrogen, is never found free in nature, but always combined with other elements in solid form. It is evident therefore that it cannot be added to the soil from outside sources by any crop as can nitrogen. Butter is the only product which can be sold off the farm without the removal of phosphorus.

While it has been estimated that an average fertile soil contains enough phosphorus to produce from 150 to 250 ordinary crops, yet from the practical standpoint this is ridiculous, since long before this element was exhausted from the soil the growth of every crop would entail a heavy financial loss. And that most soils are deficient in available phosphorus for such crops as potatoes and turnips, is amply proved by the large and profitable increased yields obtained by the application of phosphatic fertilizers.

If we take the conservative view that 75% of the farm produce sold is consumed in the cities, it is evident that most of that phosphorus is lost to the land for ever. Over 90% of the phosphorus in the materials used as human food in the cities finds its way into the sewers and eventually into the ocean. The only return of this element which the sea gives to the land is in the comparatively small amounts of sea-weed and fish which are used as fertilizers. It needs no further argument therefore to prove that successful mixed farming continually reduces the amount of phosphorus in the soil. To offset this reduction it is necessary to apply to the soil some fertilizer containing phosphorus. The most abundant source of phosphorus for fertilizer purposes is rock phosphate,

which has little value until converted into acid-phosphate; bones and the refuse from the meat-packing and fish-canning factories also contain phosphorus; basic slag, a by-product in the manufacture of steel, is another useful phosphatic material; and guano is another fertilizer used to supply phosphorus, though the amount now available is not very large.

In addition to these outside sources, it is essential that the direct loss of phosphorus on the farm be as small as possible. This can only be brought about by taking care of the manure, especially avoiding the loss of the liquid part and not allowing any loss through leaching by rain and water.

POTASSIUM.

Potassium, like phosphorus, is never found free in nature, but always combined with other elements.

Taken as a whole, cultivated land is in less danger of being depleted of potassium than of either nitrogen or phosphorus. The rocks from which our soils have been formed contain on the average more than twenty times as much potassium as phosphorus.

But certain types of soil, particularly those of muck origin and very sandy soils, are apt to be unprofitable unless supplied with this element. Certain crops also, especially potatoes and mangels, respond very generously to potassic fertilizers.

At present, Germany supplies the world with potassium-bearing minerals and fertilizers. Wood-ashes and the ashes of all plants contain a small amount of this element. Before the German supplies are exhausted, it is probable that a method will have been discovered of rendering rocks containing potassium of use as fertilizers.

From the above we may conclude that it is advisable to use potassic fertilizers on certain types of soil; and on certain crops they may nearly always be used to advantage. The application of manure which has been so stored as to preserve the liquid portion and prevent leaching by rain and water, will also do much towards conserving the amount of potassium in the soil.

In fine, the most important points in the conservation of these most important elements of plant-food, viz: nitrogen, phosphorus and potassium, are:

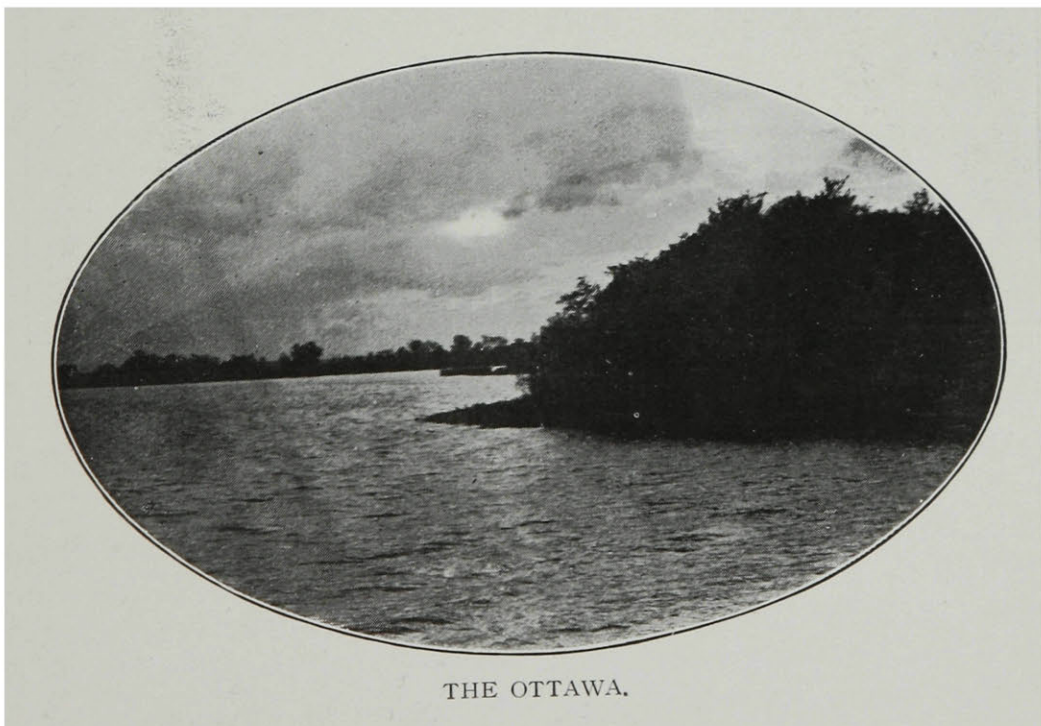
(1) The careful preservation of all farmyard manure.

(2) The valuable nitrogen-gathering power of the leguminous crops, one of which should find a place in every rotation.

(3) The advisability of using phosphatic fertilizers. While their use on every crop would rarely prove profitable, they may generally be used to advantage at least once in the rotation, generally on the hoed crop; it is not improbable that their application to the leguminous crop might prove even more advantageous, thereby ensuring a larger crop and with it a larger addition of nitrogen.

(4) The need of potassic fertilizers on some soils and some crops.

This article will have served its purpose if it draws the attention of its readers to the slow but inevitable impoverishment of our soils in plant-food under the selfish methods now in common use, and to the simple means by which our soils can not only be maintained at their present level of fertility as affected by plant-food but improved in that respect.



THE OTTAWA.

Refrigeration in Relation to Fruit Growing in Canada.

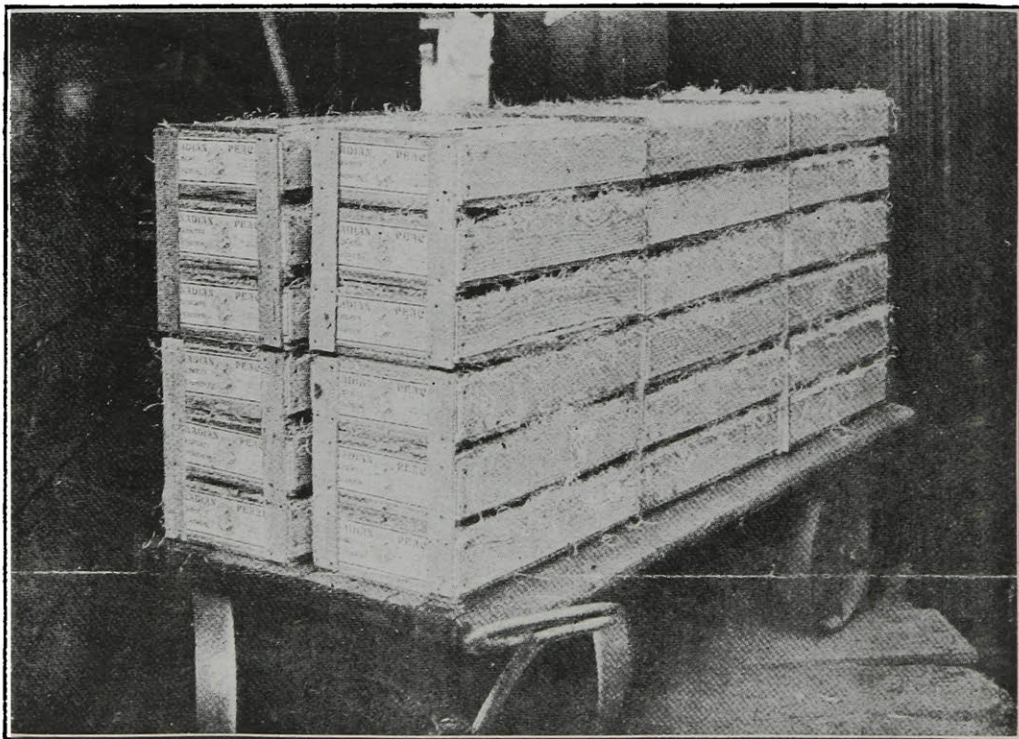
By J. A. RUDDICK, Dairy and Cold Storage Commissioner.

(Extracts from a paper read before the Third Dominion Conference of Fruit Growers).



THE modern use of refrigeration is nothing more than the systematic application of principles that have been recognized from time immemorial, and which have been universally practised by every housekeeper in the land. The vegetable and fruit cellars

a 'frost proof' warehouse is using cold storage, which is more or less effective as the temperature of the warehouse is reduced to the minimum of safety. These methods, that take advantage of what may be called natural cold storage, are, of course, defective inasmuch as they are least useful, if not entirely valueless, just



A TRUCK LOAD OF PEACHES READY FOR LOADING IN REFRIGERATOR CAR.

in connection with our houses, differ from regular cold storages only in degree or in the lack of that absolute control of temperature which refrigeration gives. The practice of hanging meats or poultry in a cold place during the winter months, has exactly the same object behind it as if the goods were placed in cold storage. The fruit grower who holds his apples in

at the time when the protection is most needed.

No one doubts the value of a low temperature in the preserving of milk, butter, meats, fruits or vegetables for family use, and such foods are always placed in the coolest spot available and very generally in a miniature cold storage warehouse in the shape of a kitchen refriger-

ator. And yet it is a fact that there is still some prejudice against cold-storage foods, not only on the part of the consumer, but with the dealer as well. It is true that food products do not always come out of cold storage in a satisfactory condition, for the simple reason that they are often out of condition, or over mature, when they are placed in cold storage. The function of cold storage is preventive not corrective. I mention this because I find there is much need for more attention being paid to this point in the application of refrigeration to the preservation of food products.

Refrigeration can be made to serve the fruit trade of Canada in the following different ways:—

1. The use of iced cars for the transportation of fruit in warm weather.
2. The chilling of early apples and tender fruits before shipment in iced cars.
3. The cold storage of fruit intended for long keeping, and to extend the season for choice varieties.

USE OF ICED CARS.

The use of iced cars for the carriage of fruit is increasing year by year, and fruit growers are learning that the question of temperature in transit is of quite as much importance as the length of time occupied in carrying the fruit from one place to another. As an illustration of what I mean I would draw your attention to the experience of this department in the shipment of peaches from St. Catharines and other Niagara points to Montreal for export to Great Britain in 1910, the details of which are to be found in Bulletin No. 27 of the Dairy and Cold Storage Series. We found that we got better results when the fruit was dispatched in iced freight cars than we did when it was sent by express without ice,

although it took one day longer to go by freight. The same thing will apply in the shipment of any fruit. The manner in which the packages are stowed in an iced car is of the greatest importance in securing the best results. The full benefit of the iced car is lost unless there is provision for a free circulation of air from the ice bunkers and among the packages. Refrigerator cars are very often loaded so that there is little or no circulation of air and in such a car the temperature will be uneven and much higher than it should be. This is one thing about which a great deal has yet to be learned by the average fruit shipper in this country. There is rather a common impression that the ice adds moisture to the air in a car, but that is not necessarily so, and if there is a good air circulation under and between the packages the air will be drier than it would be if there was no ice in the car at all. The moisture is carried by the circulation of air to the ice bunker and deposited on the cold surface of the ice.

CHILLING OF EARLY APPLES AND TENDER FRUITS BEFORE SHIPMENT.

Peaches, plums and other soft fruits are not susceptible of being preserved for any length of time in cold storage. The best that can be done is to keep them in a firm condition for transportation and marketing at reasonable distances. The refrigerator car is good as far as it goes, but it is weak when depended on for prompt cooling. The proportion of ice to the contents of a full car is necessarily very small and when a car is filled with warm fruit, it takes too long to reduce the temperature. This is all the more noticeable if the car itself has not been chilled before the fruit is loaded. A temperature of 40 degrees may be considered about the minimum possible

temperature in a refrigerator car in warm weather, but it seldom goes below 44 or 46 unless the heat is out of the fruit before it is loaded. If the fruit is warm when loaded into the car, it will take from two or three days to bring the temperature down and the car will have to be kept well iced in the meantime. All this time the ripening process is proceeding rapidly.

PRE-COOLING.

This brings us to the question of pre-cooling which on a large scale has been confined almost entirely to the Pacific slope in the United States. The conditions under which this system has been developed, especially in California, find no exact parallel in Canada, yet I am inclined to think that there is a limited scope for the operation of such plants in this country. The Niagara district probably offers the best opportunity for successful operation.

Pre-cooling may be carried out either by placing the fruit in a cold-storage warehouse or by having it cooled in the car after it is loaded for shipment. It is the latter method which is attracting most attention as being the more practicable of the two. There is, however, no difference in principle and the system of car-cooling is favoured largely because it saves time and the extra handling of the fruit in and out of the warehouse. In a simple car-cooling plant, no storage rooms are required. The cars are run into a shed adjoining the building which contains the refrigerating machinery, and by means of adjustable ducts a stream of cold air is forced through the cars. The intake is usually attached to a side door and the return to each hatch at the top of the car. Thus the air is circulated between the bunker contain-

ing the expansion or cold coils and the car containing the fruit, transferring the heat from one place to the other. As the cars in most cases would require icing after the cooling is finished it would probably pay to manufacture the necessary supply on the spot, as the refrigerating machinery could be used for that purpose when there are no cars on hand to be cooled. The cost of manufacturing ice under ordinary ice factory conditions runs from about \$1.35 to \$1.50 per ton. It would be necessary if ice was manufactured to provide refrigerated storage space for it. The pre-cooling of a car of fruit is equal to two or three tons of ice meltage, according to the quantity of fruit and the amount of heat which it contains when put in the car. This represents the saving in ice to be credited to pre-cooling, but of course the saving of ice is not the most important thing. The cooling of a car may be completed with a well equipped and properly designed plant in about four or five hours, and the number of cars that may be cooled at one time depends on the size of the plant. There is practically no limit to the number of cars that could be handled at one time.

Experienced engineers say that there should be about 12 tons of refrigeration for each car to be cooled. That is to say, if it is desirable to cool 10 cars at one time it will be necessary to have machinery with a capacity of about 120 tons of refrigeration in 24 hours. There are a number of rather complicated engineering questions involved in the construction and operation of a car-cooling plant, and it is advisable that the highest expert advice should be secured before anything of the kind is undertaken.

This brings me now to the third division of my subject.

**THE COLD STORAGE OF FRUIT INTENDED
FOR LONG KEEPING AND TO EX-
TEND THE SEASON FOR CHOICE
VARIETIES.**

It is one thing to keep apples merely from rotting and another thing to preserve them in that crisp juicy condition which adds so much to their value and encourages large consumption. Some varieties may be preserved in ordinary cold storage quite as long as it is desirable to keep them, but most of the standard varieties could be delivered to market in better condition and with less loss from decay if they were promptly cold-stored after picking. I want to emphasize this point. It is of the highest importance that there should be as little delay as possible. A delay of one week between picking and storing will shorten the life of the apple even in cold storage by many weeks. This applies particularly to the early or quick-ripening varieties. Any apple which is ripe enough to show signs of softening is past the stage for successful cold-storage treatment. Any decay in the form of rots, especially the ordinary brown or soft rot, will be arrested very little, if arrested at all. Take the Northern Spy for instance. Well-developed specimens with sound skins, and put away in time, will keep with the best, but at the same time this variety is also very susceptible to rots if the skin is broken or injured in any way, and for this reason it frequently does not keep well in cold storage.

Apples which are well matured on the trees, but still firm, will keep better and longer than if picked at an earlier stage. Well-matured apples show less tendency to scald. This is very marked in the case of the Greening. In tests which the Department made in 1909-10, apples of this variety picked rather early at a certain date, scalded badly in cold storage

while others from the same tree picked three weeks later were almost free of this rather serious defect. If the Greening has reached the stage when it shows a faint blush there is not apt to be much scalding. A good colour seems to be a great protection against scalding in all varieties. It follows therefore that late varieties of apples which are grown in localities where the season is longest and where they reach the greatest maturity on the trees, are the ones which will give the best results in cold storage. Our experience sustains that view. This becomes all the more important, when considered along with the well-known fact that under what may still be termed as normal conditions of handling the apples grown in these localities are not noted for good keeping qualities. The same thing applies in general to a season like 1911 when the crop matured early on account of the hot weather. There are very general complaints about the poor keeping of apples this winter, and yet the 1911 crop possessed the very qualities which would have given good results in cold storage providing the storing had not been too long delayed after picking, as was the case with some that I have heard of.

I believe that the repacking of barrelled apples, which is now so generally practised in the frost-proof warehouses in Ontario and Nova Scotia, could be dispensed with if the apples were sent promptly to cold storage. In 1909 the Dairy and Cold Storage Branch made some trial shipments to test this matter. A carload of Spies and Baldwins were divided, one lot being put in a frost-proof warehouse and the other sent to cold storage, at St. John, N.B. The first lot was repacked, but the cold storage lot was shipped without repacking. Both lots were sold together in Glasgow in the

month of March. After paying the cold storage rates we found that the cold-storage lot netted us from 10 to 70 cents per barrel more than the others.

There were both No. 1 and No. 2 apples in these lots, and it is interesting to note that the No. 1 apples gave the greatest gain in cold storage. Full particulars of these trial shipments will be found in Bulletin No. 24 of the Dairy and Cold Storage Series. It may be of interest to add that one box of Spies from the cold-storage lot was held for eighteen months. The quality was well preserved and the apples stood up well after being removed to an ordinary room temperature. This box was held for the first six months at 32 degrees, and after that at 30. The latter is undoubtedly the best temperature, but of course it is very near the danger line, and great care has to be taken at such an extreme low temperature to prevent some part of the storage room from reaching the freezing point of the apples.

There is evidently considerable difference in the behaviour of different varieties of apples in cold storage, and this phase of the subject offers a field for further investigation and study.

The actual freezing temperature of fruits will depend largely on the percentage of sugar in the juices. I do not think any apples will freeze at 30, but how much lower some varieties might be safely carried I am unable to say. Australian experts say that pears will keep

best at 29 to 30 degrees, and that grapes grown in that country will stand even lower temperatures because of a higher percentage of sugar. I think it is likely, however, that Australian grapes contain much more sugar than those grown in Canada do, because of the hotter climate in that country.

I have not attempted to do more in this paper than to show some of the possibilities of cold storage in relation to the fruit industry. There is of course another side to the question, and that is the commercial one, as to how far the cost of cold storage will be balanced by increased returns in the sale of the fruit. This will have to be determined very largely by practical experience. I do not believe for a moment that it is necessary or desirable to provide cold storage for the whole of the Canadian apple crop. I have indicated some of the special ways in which it may be of great service. I believe that it would pay to refrigerate a large proportion of the so-called frost-proof warehouses now in use in Ontario and in Nova Scotia. This could be done at comparatively little cost, as most of them are already fairly well insulated.

It has always seemed to me since I have been able to give any attention to such matters that small cold storages using ice, or better still salt and ice as a refrigerant, would be of much service to individual growers, and especially in the tender fruit districts.

The Farmer and the Tariff.

Speech given by R. S. KENNEDY, Ag. '12, winner of Public Speaking Contest, 1912.

PURPOSE OF TARIFF.



WHEN Canada adopted principles of protection in 1878, it was with the clear understanding that when the protected industries had had time to develop and get firmly established, the protection would be withdrawn and people relieved of further taxation for the benefit of industry. The election of 1896 was largely decided on

ACTUAL ACTION.

Let us see now what are the actual present-day results of this tariff of ours, framed as it is for the protection of infant industries and the collection of revenue.

This lusty infant, now over thirty years old, has waxed strong and fat on its protective diet. As a rule it is quite strong enough to hold its own against competitors. But this unsophisticated



A CLASS AT WORK IN BACTERIOLOGY LABORATORY.

this question, but the revised schedule of 1897 only gave a little relief, and in 1907 the people were finally disillusioned as, though it gave a reduction on a few small items, it really protected the manufacturer more.

The other great argument for the tariff is that it affords the best way of collecting the revenue necessary for the carrying on of the Government.

infant of thirty prefers to stay wrapped in its long clothes, and in a deep bass voice to cry pitifully for more protection and to bewail the abnormality of putting its tender little legs into trousers. In the year 1910, Canada exported \$31,500,000.00 worth of manufactured goods. That means that our manufacturers could make their goods economically enough to compete with their rivals in

other countries—chiefly in the United States—and not only to compete with them on the level ground, but to pay a high duty and then sell their goods in competition with their tariff-protected rivals. Does that uphold the argument that our manufacturer cannot stand alone? The most flagrant example of this giant in swaddling clothes is the one that affects the farmer most, namely, the manufacturer of Agricultural Implements. During the past fiscal year we imported \$4,000,000.00 worth of Agricultural Implements but we exported \$5,000,000.00 worth. Does that seem as if this industry was in a helpless state? The Massey Harris Company has just invested \$3,000,000.00 of their spare cash in a big plant in the United States. Mr. Metcalf, in giving evidence before the Committee of Ways and Means on behalf of the International Harvester Company, said that Canada could produce these implements as cheaply as the United States or England or Germany. This is the industry which is protected by an average duty of 20%.

We now come to the second point, namely, that a Protective Tariff is the best means of raising the country's revenue. Let us take the case of these Agricultural Implements. In 1908, \$12,000,000.00 worth of Agricultural Implements were manufactured in this country, \$2,000,000.00 worth were exported, leaving \$10,000,000.00 worth for home use. In that year \$1,000,000.00 worth were imported and the Government took the 20% duty on this, amounting to \$318,782.00. It is universally conceded that the manufacturer adds on to the selling price of his goods, the amount of protection afforded him, in this case 20%. The manufacturer then sold \$10,000,000.00 worth of implements, which the farmer might have bought for 20%

less if there had been no protection. The farmer paid \$10,000,000.00 for goods which the manufacturer could have sold profitably for \$8,000,000.00. The farmer paid the manufacturer \$2,000,000.00. With many other articles it is the same. For every \$100.00 the farmer is compelled to pay, by the tariff, in the way I have shown above:—

On Agricultural Impl.,	Mfr. gets	\$86.00
“ “ “	Gov't. “	14.00
“ Cement	Mfr. “	92.00
“ “	Gov't. “	8.00
“ Boots & Shoes,	Mfr. “	94.00
“ “ “	Gov't. “	6.00
“ Leather,	Mfr. “	94.00
“ “	Gov't. “	6.00

It is a curious method of collecting revenue when the farmer has to pay about ten times as much to the manufacturer as to the Government. We find then that the tariff as a protection to manufacturers is often unnecessary, and that as a means of revenue it is always unjust. But entirely apart from this, the tariff at every turn seems to have been framed without the slightest attention to the farmer's interest. He is put at a disadvantage with the American farmer, who is protected by a tariff more than twice as high as the one which protects the Canadian farmer. Thus in the United States there is a duty of \$4.00 per ton on hay but in Canada only \$2.00; 25 cents per bushel on wheat but in Canada only 12 cents, 6 cents per pound on cheese but in Canada only 3 cents.

Again, while the tariff averages only about 3½% on the actual raw materials used by the manufacturers, it squeezes out a duty of 11% on the raw materials of the farmer. Lastly we find that the protection for the raw farm products is less than the protection afforded to those products after they have been manufac-

tured. He produces his goods with an 18% tariff to help him, he buys them back again as manufactured articles from a man who is protected by a duty of 28%.

We have seen that the tariff was originally made to get money for the Government and to protect infant industries, and how in present-day conditions it gets money for the manufacturer, not the Government, and bolsters giant monopolies instead of helping budding industries.

THE RESULTS.

This is a most illogical system, for it places the great farming community at a disadvantage, it stints the trunk of a tree of its sap in order that the branches may have more, its results are many. In the last 25 years Ontario has actually lost 100,000 rural inhabitants, every province east of Manitoba has a smaller rural population than it had 20 years ago. Even in the western provinces where free land and virgin soil have made farming a less poorly paid occupation than in the East, in 1901 the urban population was only 20% of the total, but in 1906 it was 32% of the total. Every farmer knows the difficulty of getting the labor which is necessary to work his farm as it should be worked; and why is that? It is estimated that each farmer pays the manufacturer because of the tariff \$100 to \$200.00 a year. And it is that very manufacturer who is competing with him for his labor. Is it wonderful that the young men of the farms flock to the city, that investors place their money in factories rather than in farms, that the manufacturer gets more than ten times the interest on his investment that the farmer does?

Yes, the farming community of Canada is terribly handicapped, yet it con-

stitutes 66% of the population and is by far the most valuable constituent of any lasting commonwealth. This great class can remove the disabilities which are placed on them if they will. They must do it by co-operation and combination. In this matter the interests of practically all farmers are identical, and it is a most important one to them. Let them form associations in each electoral district and pledge themselves to vote for the candidate who promises them relief. Let them tell him that the tariff protects a class who no longer need such high protection, that the farmer is taxed 28% on all he uses and is only protected by a tax of 18%. Let them quote Sir Wilfrid Laurier himself, who said that for every \$1.00 that the tariff customs collect for the Government, it gives \$2.00 to \$4.00 to the manufacturer. Let them tell him that the \$400,000,000.00 invested in manufactures, after every item has been reckoned in, pays 20%, but that \$1,000,000,000.00 invested in agricultural industries gives only 18% even when the working capital is left out and nothing is allowed for the labors of the farmer and the adult members of his family. That if these were reckoned in as they are in the manufacturing industries, very little would be left over for interest. Show this candidate of yours that the cities are increasing at the expense of the country and that unless a reform is made Canada will lose that great independant yeoman class which is the mainstay of every nation. Let every electoral district which has a majority of farmers send a member to Parliament pledged to remove from the farmers this great burden of an unjust tariff, and in a few years the great farming community of Canada will come into their rightful heritage of prosperity and wealth of which the tariff has so far deprived them.



Roots and their Value.

By PAUL A. BOVING, B.S.A., Cereal Husbandry Department, Macdonald College.



WITH dairy cows, rapid and easy digestion and assimilation ensure cheap and abundant yield. Given an ordinary ration its improvement in these respects may be effected in two different ways, by the addition of rich nitrogenous feeds, such as oil cakes, and by the employment of succulent feeds, such as silage and roots.

It has been clearly proven that the introduction of the various oilcakes to an otherwise fairly satisfactory ration will considerably enhance the value of this ration. The same result, however, can be obtained by a somewhat extensive use of succulents if the ration in the first place is so composed that the minimum proteid requirements of the cow are fulfilled. This driving capacity of the succulents cannot be too highly emphasized and deserves to be much more generally appreciated, because the desired effect, with its corresponding increase in milk, can be made at a much

cheaper rate as compared with the highly expensive nitrogenous foods. One could not choose a more favorable year than the present to give point to this statement.

The two chief succulent winter foods for milch cows in Canada are silage corn and roots, neither of which is grown to the extent it deserves. In spite of their difference in growth and character they have many qualities in common. Outside of feeding value both are invaluable as cleaning crops in a regular rotation ; both are gross feeders and require heavy manuring and good tillage of the land ; both are further apparently expensive to grow, but only apparently so, since in reality they yield so much more to a given area than other commonly grown crops that the extra labor is more than well paid for.

One of the easiest ways for the dairyman to calculate the value of a crop is to reduce the yield to what is known in many countries as feed units. The feed

unit is calculated to consist of one pound of Indian corn or its equivalent of other feeds in feeding value : Thus—1.1 lbs. of oats, 5 lbs. of straw, 2.5 lbs. of mixed clover hay, 8 lbs. of silage corn, 10 lbs. of mangels, swedes or carrots and 12.5 lbs. of turnips all have the same feeding value within a properly many-sided ration—according to extensive feeding experiments.

In quoting the yield from different crops I am sorry not to be able to present average figures for more than 3 yrs. Nevertheless, in as far as they go I consider Macdonald results to be some of the most reliable that can be obtained.

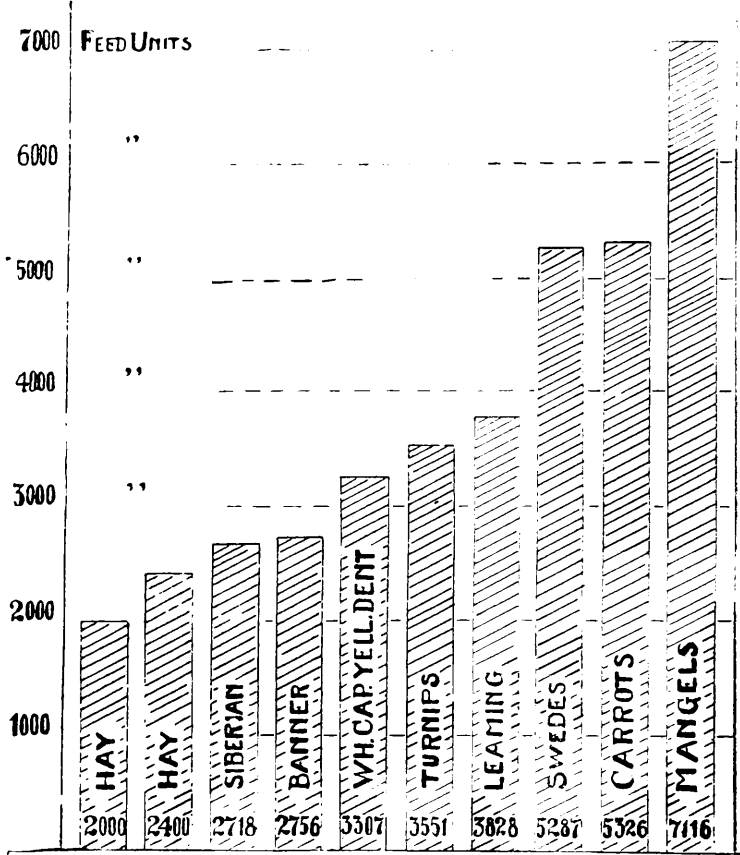
Average yield at Macdonald College from 1 acre during 1909-10:—

	Tons, Straw.	Lbs. Grain.	Feed Units.
Banner Oats.....	2,446	1,956	2,756
Siberian Oats.....	2,068	2,080	2,718
	Tons, Fodder.		
Leaming Corn.....	15,313		3,828
White Cap. Yellow Dent Corn.	13,230		3,307
	Tons, Hay.		
Mixed Clover and Timothy...	2,500		2,000
" " " "	3,000		2,400
	Tons, Roots.		
4 Mangel varieties, average...	31,384		6,276
2 Swede " " ...	19,836		3,967
2 Turnip " " ...	16,635		2,661
1 Carrot variety " ...	21,332		4,266

In the right hand column it may be seen that the mangels have yielded more than three times as many feed units to the acre as in the case of the hay crop, 2.27 times as many as the best oat variety, and almost doubled the corn, which again by far surpasses both hay and oats. I might add as well that the yields of corn, though actually obtained during the three years in question, will no doubt show considerably higher in future years. In connection with the root yields I beg to observe that the tops have not been included in this estimation. The top is nevertheless an excellent feed

and can be used either fresh or as silage; 15 lbs. of mangel, swede or turnip tops and 10 lbs. of carrot tops constitute one feed unit. In this case we would have to increase the figures by 840 feed units for the mangels, 1320 for the swedes, 890 for the turnips and 1060 for the carrots. The enormous differences which arise when the root leaves are counted is perhaps still more clearly brought out in the following diagram, which includes total yield and in which each mark represents a yield of 1000 feed units:

TOTAL YIELD OF FEED UNITS
PER ACRE IN DIFFERENT CROPS
AT MACDONALD COLLEGE 1908-10



Someone may perhaps feel inclined to suggest that the average farmer can not obtain such root yields as described herein, and I am willing to admit that this may be true with some modification. He will probably not be able to do it the

first year he attempts to grow roots, but there is no reason whatever why he should not accomplish it in a very short time. There is no magic about it, and 31 tons of mangels, as we have got here, is by no means a phenomenal yield. I feel perfectly sure that we shall be able to raise it considerably in coming years.

Moreover, does the average farmer get hay yields of 2.5 to 3 tons of hay, or oat yields of 2,000 lbs. of grain, and corresponding yields of straw? Certainly not. If roots are properly cared for, they will always outyield grain and

considerably in this respect. 1.1 lbs. of dry matter correspond to one feed unit, and dry matter in roots is in fact used as the basis or feed unit standard in Scandinavian countries, where corn cannot be grown to advantage. Then again the question arises, if there is not a difference in feeding value of the dry matter in different kinds of roots. This subject has been properly investigated in Sweden as well as in Denmark, by feeding experiments with some six hundred cows, and the results may be summed up in the following paragraphs:

1. The dry matter in different kinds



DATES OF SEEDING IN TURNIPS:—Early seeding, heavy yield of somewhat coarse roots; late seeding, considerably smaller yield of smoother roots.

hay. Thus the tremendous yields in spite of the extra expense in growing, as mentioned above, ensure us a long way the cheapest crops by realizing the object sought. It was said above that 10 lbs. of mangels, swedes and carrots, or 12.5 lbs. of turnips, each constitute one feed unit. But this is not absolutely correct, it is only approximately correct, and refers to average conditions. It is all right if the various amounts of the respective roots mentioned contain exactly 1.1 lbs. of dry matter, but it must be remembered that root varieties differ

of roots has in the main the same chemical composition with the exception of sugar content.

2. A decided difference between different kinds of roots in their influence on the percentage of fat in milk has not been shown.

3. Also in regard to the influence of the dry matter on the live weight of the cows so little difference was found that the results must be regarded as uniform.

4. Where the roots have been exchanged with each other in proportion to their contents of dry matter, the dif-

ferences in milk yield have been so very small, that the dry matter in roots belonging to the carrot, turnip, swede, mangel and sugar mangel groups must be said to have practically identical feeding value.

It is therefore of the greatest importance that each farmer should grow the kind of roots which give him the best yield of dry matter, or the highest yield of feed units, which is the same thing expressed in different ways. Referring to the table and diagram, we notice that the mangels give by far the largest returns here at Macdonald College. It cannot by any means be taken for granted that this proportion will hold everywhere, and local experiments are therefore required to ascertain which kind will do best in a certain locality. The matter of testing and comparing different varieties and strains should be confined to the experimental stations where they can be thoroughly judged in every respect. But the question whether the emphasis should be laid on the growing of mangels, swedes, turnips, or carrots under certain climatic and soil conditions can only be answered on the spot.

For different reasons, however, it may be wise not to exclude other kinds altogether, because one certain kind of roots has proved to be superior in a certain locality. I would thus, for instance, strongly advise the planting of sufficient mangels or swedes for feeding during the spring months on farms where turnips do best generally speaking, and for my own part I would certainly not miss the early developing turnips for fall feeding, even on the best of mangel farms.

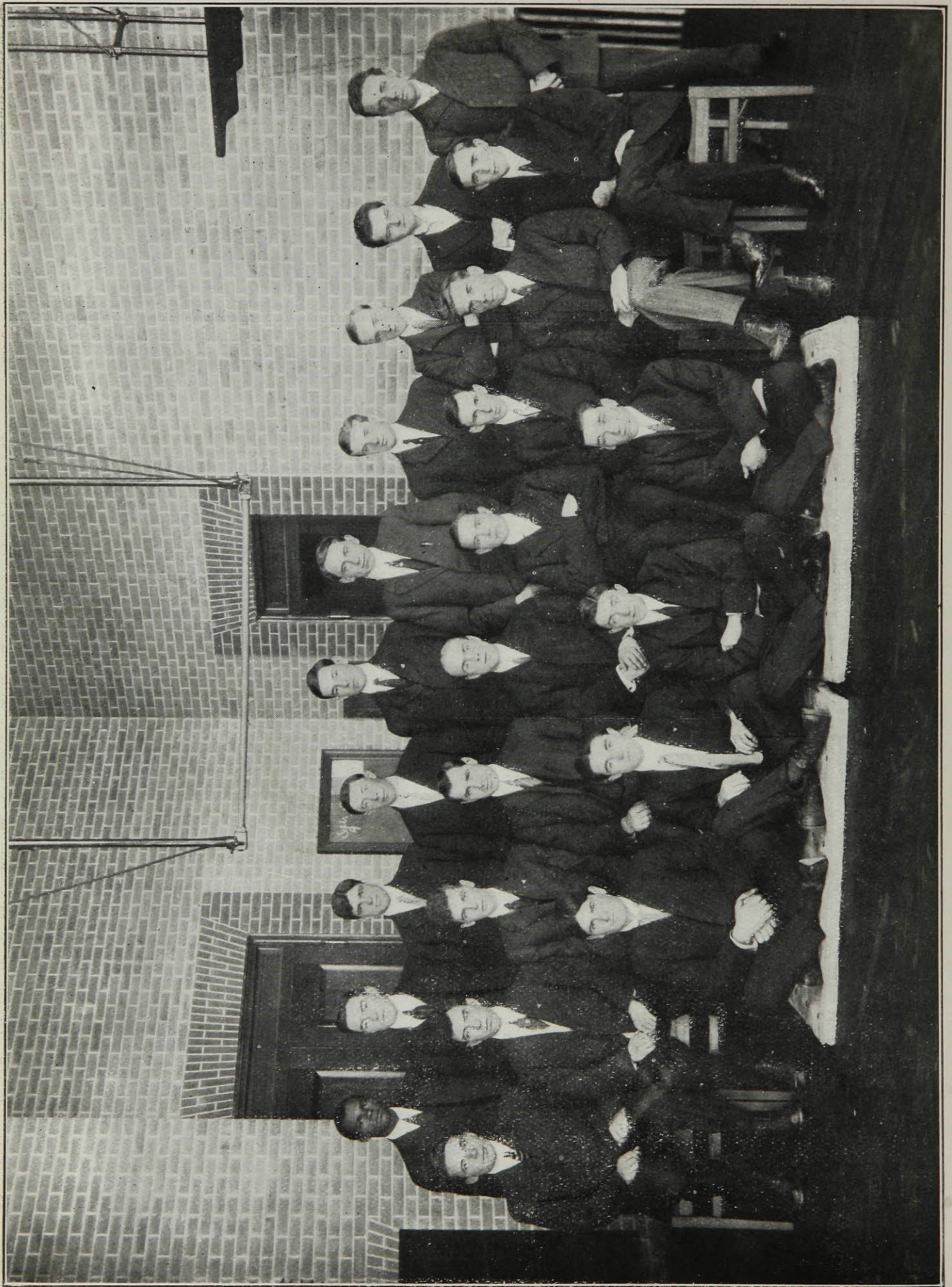
Just now there are some very interesting experiments being conducted in the Animal Husbandry Department at Macdonald College, regarding the comparative feeding value of roots and corn silage, and their dependence on one another, and I for one look forward to the results with the greatest interest, because I feel sure that they will in the strongest possible manner emphasize the words of Professor Barton to the Huntingdon Dairymen's Association at Hemmingford this winter. Professor Barton stated there, that in his experience it is impossible to get best returns and results from milch cows without both corn silage and roots.

The Growing of Mixed Grains for Feed.



THE custom of sowing different grains in mixtures of varying amounts has long been followed by the farmers of Quebec and other provinces. This method has been pursued with the idea in mind that a larger yield was obtained, and where intended for feeding purposes the labor of mixing was avoided.

We all have noticed lusty plants of wheat growing in a field of barley, and have found, on examination, that they were superior in straw, size, and numbers of grains, to plants of like kind growing in an adjoining wheat field. The same principle has been found to hold true, but to a lesser degree, where, when the grain was intended for feed, a peck of wheat was sown along with barley or



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oats. This can be explained from the well known fact that all grains, while using the same elements of plant food, and in practically the same proportion, do not feed as widely nor at the same depth in the soil. Taking advantage of this fact, it has been found possible to grow two different grains together with a greater return of straw and grain than if separately grown.

While in many cases this has proven profitable, we must not think that because two grains together give an increased yield that three or four would give still greater returns. It is only in the case of growing together two of our heaviest yielding grains ripening at the same period that a larger yield has been proven possible.

To grow mixed grains with the greatest success we have to know the individual characteristics of the various grains. Some plants, owing to an almost leafless nature of growth and slight stooling habits, are ideal for sowing with others which possess greater stooling proclivities and ranker stems. This holds especially true with barley and oats. Barley makes a slim growth and is a surface feeder, while oats feed at greater depths, stool more and make a ranker heavier growth. As will be seen, plants of this type are ideal for growing together.

A grain with a tendency to lodge is very detrimental to a mixture, for it not only goes down itself, but carries the other grain with it. It is a matter of observation that lodged grain will rarely yield with grain that is erect at time of cutting, and this fact, coupled with the extreme difficulty of harvesting, makes it especially desirable that grains of this character should be avoided in a mixture. The time of maturity is important, as crinkling and shelling are often the

result when one grain has to be held for another to ripen. As all classes or varieties do not possess these undesirable features in an equal degree, it can be avoided somewhat by combining grains not weak in these respects and having a more uniform time of maturity. These factors, while not at all prohibitive yet demand that discretion be shown in choosing the grains and varieties, in order to make a profitable mixture.

With a view to ascertaining what classes of grains, and what varieties and proportions of each were the most suitable and advisable for general growing in mixtures, the Cereal Husbandry Department of Macdonald College have conducted experiments, the results of which are given in tabular form and serve as a basis on which to proceed to a more thorough discussion of the subject.

Classes of grains ranked according to yield for an average of five years:

Six-rowed barley	2744	lbs. of grain
Two-rowed barley	2257	" "
Oats	2169	" "
Peas	2047	" "
Spring Wheat	1783	" "

Varieties recommended for general growing.

Six-rowed barley	Mensury
Two-rowed barleys	Duckbill
Oats { Early	Daubeney
{ Medium to late	Banner
Peas	Prussian Blue
Spring Wheat	Pringle's Champion

With the idea of making the best mixture, these varieties have been chosen from the fact that they are better balanced, are high yielding and lend themselves most readily to combination.

As has been shown in above experiments, barley and oats are our heaviest

yielding individual grains. It has been proven repeatedly that these two together give a larger yield than it is possible to obtain separately. Wheat, owing to the long time required to come to maturity, is almost impossible in any combination except with a late oat, but even then fails to give as high yields as it would alone. In spite of common observations to the contrary, peas, owing partly to late maturity and partly to their spreading and reclining habit of growth, do not give good results in combination at St. Anne. It is remarked by many farmers that they can grow peas with barley or oats very successfully as either of these tend to prevent the lodging of the peas. The present experiments would seem to provide direct proof to the contrary under conditions obtaining at the college, as it was found that peas invariably lodged, carrying the barley or oats with them. Oats, barley and peas, the three together in equal proportions, give a fairly satisfactory mixture although failing to yield as they would individually.

A barley of the six-rowed type is preferable as they are our heaviest yielders, although ripening slightly earlier than the two-rowed. In oats, on the other hand, our heaviest yields are obtained with few exceptions from a medium to late maturing variety. Therefore, to make a satisfactory mixture of these two grains we have to choose an oat that gives a large yield, yet one that matures early. For this purpose we use Daubeney Oat and mix this with Mensury barley. This has proved to be an admirable combination as more grain was produced than if either were grown singly. If, however, we are growing a standard oat such as Banner, Siberian or Triumph, it will be necessary to grow a later maturing barley than any of the

six-rowed varieties. This means we must grow an inferior yielding barley in order to get one which will mature with our most prolific oat. The two-rowed Duckbill has proved best for this purpose, for, in comparison with the Chevalier barley, it is a higher yielder and possesses a much stronger straw. Duckbill barley and the Triumph oat have given very good results in the short time they have been tried together, but the experiment with these has not been continued long enough to enable one to draw definite conclusions.

The final results of five years' experiments are that oats and barley, in the proportion of $1\frac{1}{2}$ bushels of barley to 1 of oats, are the most desirable grains to grow together, as some varieties of each have a nearly equal period of maturity, and they give a larger yield than they would individually.

As barley will soon predominate if the seed is taken from the mixed crop it is very important that the seed be only taken from the pure grains and mixed before sowing in the correct proportion.

As this article would indicate the grower must have a good working knowledge of grain characteristics and use good judgment if he wishes to grow mixed grains with the greatest success. If mixing is practised indiscriminately, with the belief that if little is good more is better, and without proper attention being given to essential factors, the results will be a failure from the standpoint of profitable production. But, if the underlying principles are observed, and attention is given to the proper kinds of grains, proper varieties, and other factors, as shelling, crinkling, lodging, and periods of ripening, the mixing of grains may be followed with profit and satisfaction to the grower.

G. G. M., AGR., '13.

Marquis Wheat.

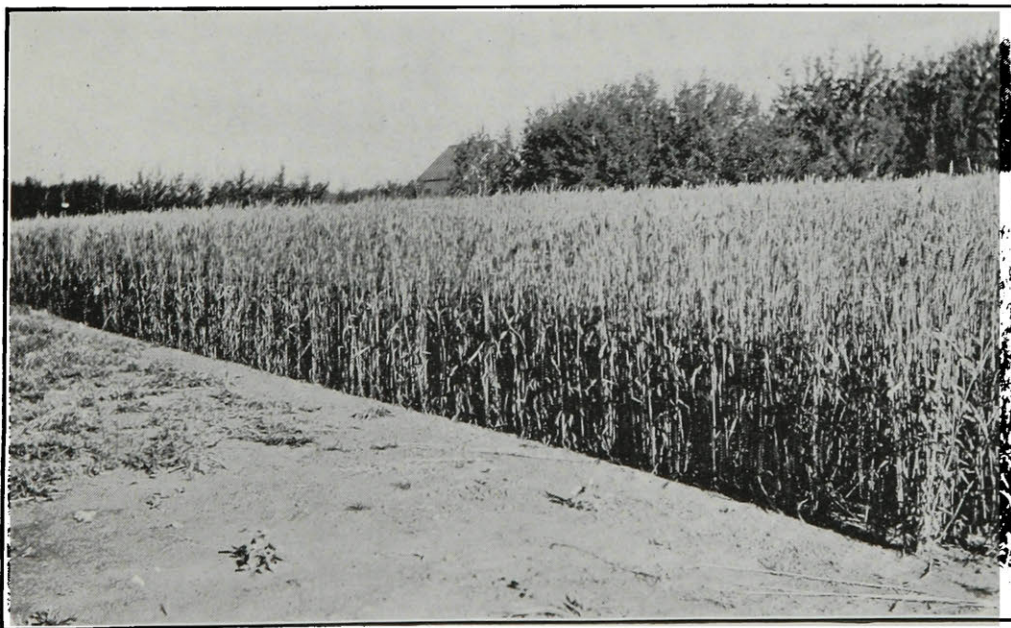
THE winning of the special prize by Mr. Seager Wheeler, of Rosthern, Saskatchewan, for the best American grown wheat, has aroused great interest and directed much favorable attention to Marquis wheat.

This wheat is the result of crossing Red Fife with an imported wheat of early ripening habit, the early maturing parent being Hard Red Calcutta, obtained from India. The cross was made in 1902, and in 1903 the Dominion Cerealists, Dr. Saunders, succeeded in isolating the new variety. After very favorable field and baking tests had been conducted both at Ottawa and Indian

Head, Marquis was distributed to farmers in 1909. In that year, Mr. Wheeler, who is a member of the Canadian Seed Grower's Association, obtained a sample and continued the work of selection and improvement, winning in 1911 the much coveted honor, with a yield of $80\frac{2}{3}$ bushels per acre.

This illustrates the benefits that may accrue when the work of the grower and experiment station is correlated. Mr. Wheeler is to be congratulated on his success, which is the reward of persevering and untiring efforts, and a tribute to his methods of farming.

G. M.



MR. WHEELER'S FIELD OF PRIZE WHEAT.



Home Grounds in the Country.

By F. G. TODD.



HE beautifying of our home grounds is such a broad and varied subject, that I shall only attempt to cover one particular phase of the subject, that of home grounds in the country.

The beautifying of home grounds in the country is a very different matter from the treatment of an ordinary city lot. In the country one has a much wider range of vision and a greater opportunity to develop individuality and character, and it is very largely upon the development of these features that the interest of our home grounds depends.

While the country dweller has a greater opportunity for developing interesting home surroundings than his neighbour in the city, it often happens that this important subject is given very little consideration by him, being surrounded often with woods and native shrubs, the immediate home surroundings are in many cases left entirely undeveloped, or if developed, the effort is usually towards a display of gardenesque plants

which do not harmonize with their natural conditions. A country place may be as artistically decorated at very little expense if the native shrubs and flowers are used as if all the exotic varieties known to garden culture are introduced.

The first and most important subject, if one is building in the country, is to secure the proper location for the house. If the property is small and located near a public highway, this is perhaps not a difficult problem, for in this case the house must necessarily be placed in relation to it; but if one has ample room, the house may with much better effect be located at some little distance from the public road, perhaps on a slightly higher portion of the ground or near some large and commanding trees. In such a location, the exact location of the house will depend principally upon the views to be obtained from the exposure of the different rooms. Those rooms which are to be used the most, such as the living room, dining-room and kitchen, should be provided with the best exposure and outlook. It is very interesting for ex-

ample if the living room can have a large central window, which will frame in some particularly fine view. The windows of all these important rooms should as far as possible face towards the south or south-east, in the dining-room especially the morning sun will be found very desirable.

When the location of the house has been decided upon, the other questions of the detail arrangement of the grounds, such as grading, planting, etc., have to be considered. The location of the drive in from the public highway is a very im-

will obviate the disagreeable effect of the curve appearing meaningless. As a general principle, it is a mistake to have the drive turn in front of the house, as this tends to cut up and destroy the simplicity of the front. A much better arrangement is to have the drive turn at the side of the house, or in some cases the entrance can be put at the rear.

The grading to be done about the house will depend very much upon the character of the house itself and its natural surroundings. If the house is of a formal character, the grading in its im-



A VIEW OF A WELL KEPT LAWN AND GARDEN.

portant matter. If the house is some little distance from the highway, a curving driveway leading up to it will be found very effective, but avoid if possible compound curves, unless the road is very long, and there should be some excuse for every curve that is made in the road, for example, if there is a slight rise in the ground, there is sufficient excuse for the drive passing around it, or the same may be said of a fine group of trees. Often too, if there is no apparent excuse existing, the placing of a large mass of shrubs in the proper position

mediate vicinity should be carried out along formal lines, that is in the shape of sharp-cut terraces, etc., but in the country it is usually preferable to try and harmonize the house as far as possible with its natural surroundings, and for this reason formal terraces are seldom desirable. Where grading is required to raise the level about the house, the new grade should unite as harmoniously as possible with the existing surface, the same may be said where there are cuts and fills along the sides of the drives and walks. A certain amount of level lawn



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is always desirable at the front of the house, and this can easily be secured without in any way marring the natural surroundings, if care is taken to unite it with the existing levels.

There is no one thing which can do more towards making our home surroundings delightful and homelike than the planting of shrubs and trees. The effect of foliage well disposed about the house and grounds, takes away the bare appearance and may even make a humble cottage appear more beautiful than its costly neighbor, where severe outlines of buildings and lawns are unbroken by foliage, and this planting is the one thing which is most often neglected, especially in the country, and which, when attempted is most likely to be badly carried out.

There has always been a disposition on the part of certain people to discuss the question as to whether a formal or informal arrangement of planting is the best. As a matter of fact, both methods of planting are desirable if used harmoniously. The stiff formal arrangement of plants is only permissible when the house itself is of a formal character, and even then should only be used in its immediate vicinity, so that it is really considered as part of the architectural treatment. For a country house which has been located amid natural surroundings, the formal arrangement of plants is entirely out of place. The arrangement of trees and shrubs will vary in each particular instance, but there are certain well-defined principles which can be carried out in every case. There should be groups of shrubs and perennial flowering

plants arranged about the base of the house to unite it more pleasingly with the grounds. In this connection climbers are very important. If the lawn extends from the house to the public highway, it is usually desirable to plant a border of shrubs about the outskirts of the lawn, both to enclose it from the highway and to form a frame for the lawn. The interior of the lawn itself should be kept as open as possible, except for the planting of scattered trees. The miscellaneous scattering of specimen trees and shrubs all over the lawn is never permissible, as such a lawn is very expensive to keep up, and has a very spotty effect without any breadth of character. Flowering shrubs should as a rule be planted in masses, so that as seen across the lawn they exhibit a mass of color sufficiently large to prevent a spotty appearance. Flower beds should as a rule be kept out of the centre of the lawn, but they are very effective arranged against the house or in the immediate vicinity, as nothing can be more charming than to have a perennial flowering border extending along the sunny side of the house or following the garden walk.

In deciding what to plant, it is usually desirable to consult with someone who is acquainted with the shrubs which do best in that particular locality where you are situated. But if a person does not wish to go to any expense in this planting of trees and shrubs, it does not mean that this must be done away with entirely, for many of our native trees and shrubs are just as ornamental when brought under cultivation as those of garden origin.

Short Course in Horticulture.



THE Short Course in Horticulture is again a thing of the past. Year by year, instructors and students look forward to the annual short course as a period of mutual helpfulness, interchange of thought, and the beginning of nobler endeavor. The Short Course of January, 1912, was no exception. A more intelligent class of men and women never visited Macdonald College. It was an inspiration to meet these, but greater to know that something was being done which would *tell* for the uplift of Horticulture in the province of Quebec.

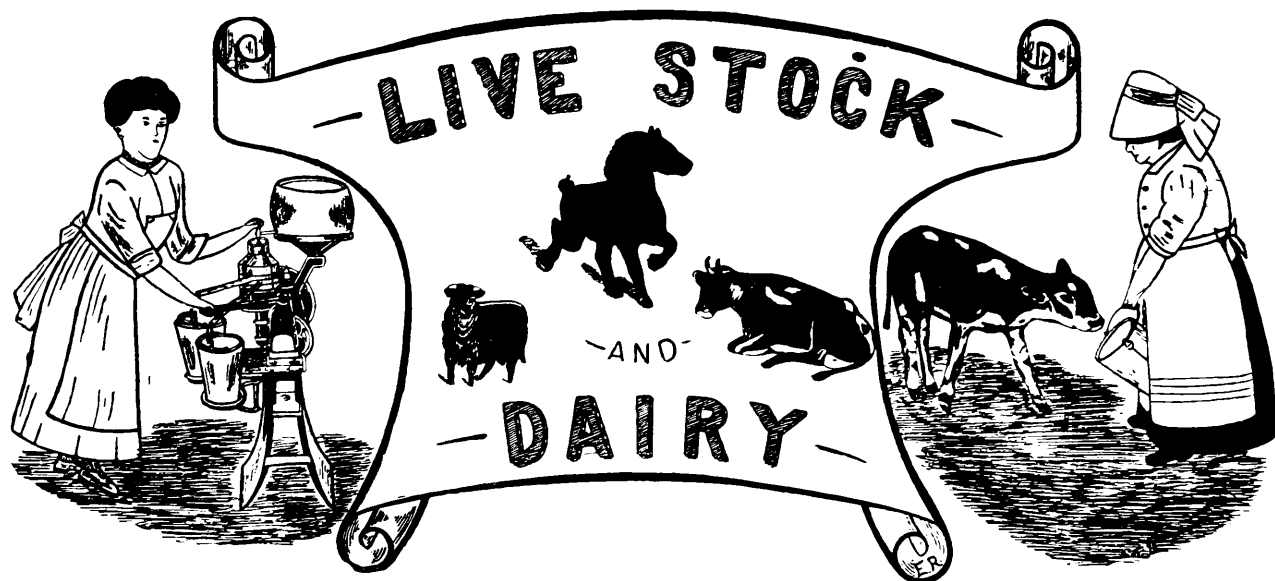
The various phases of orcharding,

such as planting, cultivating, fertilizing, pruning, grafting and packing received considerable attention. The various small fruits, vegetables and flowers were not forgotten. Better methods, more beautiful homes, and a closer contact with nature were constantly kept to the fore-front.

"Fruit culture," said the late Honorable Joly de Lotbiniere, "is the attraction which holds the farmer to the land." We think he was right. At any rate, if horticultural pursuits were removed from the farming industry, the land would lose much of its charm, and the farmer much of that which he should enjoy.



SHORT COURSE STUDENTS IN HORTICULTURE.



Monmouthshire County Council Travelling Dairy School.

By MISS JENNY REID, N. D. D., Instructor in Home Dairying.



THE object of the Travelling Dairy, as organized and conducted in Great Britain and Ireland, is, in general, to raise the standard of Dairy Products, and thereby their value, to the extent that they may become a profitable department of farming. In particular it is intended to reach a special class engaged in dairy work. This class includes those located on small farms and somewhat distant from the larger and more advanced centres, and who have neither time nor money to allow them to attend the larger Dairy Institutes.

The Monmouthshire County Council Dairy School was first started 21 years ago in a very small way, with a staff of two—"An Organizing Agent" and a "Butter Instructor." The subject was first brought forward at a meeting of the County Council, when a grant of money was asked for to start butter-making classes. The Farmers opposed the idea

of starting the classes. They contended that anybody could make butter, and believed that the scheme would involve an unnecessary expenditure of money, which, coming out of the rates, would have to be paid by them. The County Council contended that by the improved methods of separating and churning, a better article could be made that would command a better price and increase their profits. They further brought forward that outsiders from other counties were coming to their markets, and commanding the best prices for butter, cheese and poultry. The farmers' attention was drawn to the fact that Somerset, a neighbouring county, commanded in their market the highest prices for produce. Somerset, I may mention, was the first county to start "A Travelling Dairy School." The County Council made the most of this and demanded an explanation as to why all the profits should go to a neighbouring County.

For several years no properly organized method of teaching could be adopted. The work was carried on for the most part by giving butter-making demonstrations and lectures at various centres. It was very slow work at first, but by degrees pupils came to the Classes, and the pupils who did come being able to obtain a better price for their produce influenced others to join. The farmers at the time predicted that the classes would not last for more than a year, but they have now lasted twenty-one years and can count their students by the thousand. As the work increased the interest of the agricultural community was aroused. Grants were asked for at various intervals from the County Council, and given, and eventually one was obtained annually from the Government to enable them to further extend their work. Having more money now to work with classes in the following were arranged :—Poultry, Sheep Shearing, Hedging, Basket Making, Fruit Bottling, Cider-making, Bee-keeping and Gardening.

ORGANIZATION OF BUTTER-MAKING CLASSES.

The migratory butter classes are now divided up into Spring and Autumn Terms. The centres for the classes are arranged by the Director of Agricultural Education for the County. First a centre is chosen where a convenient building can be found, and where there is a good water supply. Then forms are typed and sent out to the different farms, giving the dates of the classes. Generally two or three classes are held at one centre. Ten pupils are taken in a class and each is provided with utensils : churn, butter-worker, etc., and each pupil is given from two to four quarts of cream. They are given ten

lessons, a daily lecture of about thirty minutes being given at first, then practical buttermaking generally lasting three hours. Subjects of Lecture :—Milk : its Nature, Composition and Causes of Variation, and Milk Testing; Cream Raising; Ripening of Cream; Use of Starter; Composition of Butter; Judging of Butter, and Construction of Dairy.

At the finish of each centre a practical butter-making examination is held and a County Council Butter Certificate awarded to those who gain over 50 per cent marks. In order to further encourage the attendance at the butter classes, the County Council were again asked for an extra grant to enable them to offer prizes for Dairy Produce at the Annual Local Flower Shows. The money was offered to only those centres that had shown an interest and attended all classes. These prizes at shows have done almost as much good as the classes, since the farmers' wives and daughters vie with each other as to who will take off the prizes.

THE CHEESE SCHOOL.

The butter-making classes had been progressing for some time before any attempt was made to organize similar classes for cheese-making. Finally the County Council again drew the attention of the farmers to the fact that they could command only 3d and 4d per lb. for cheese, while Somerset makers were commanding 6d and 8d in the Monmouthshire markets. A further grant was arranged for, and it was decided to hold a Cheese School during the three summer months. The farmers again stepped in and said it was only wasting money to teach cheese-making, as on half the farms in Monmouthshire it was impossible to make cheese on

account of the soil not being suitable. The belief in the inability to make good cheese on certain soils was so widespread, and the conviction so strong, that the subject had to receive careful attention. Taking this into consideration, when at all convenient, it was arranged to hold the Cheese School on a farm where it never seemed possible to make good cheese. All cheesemakers will appreciate the problem undertaken since special soils require special precautions. It was clearly shown to the farmers at the cheese school that by treating the milk in a proper scientific manner, and studying carefully the system best suited to the nature of the milk, cheese commanding a better price than that made in Somerset could be made.

After the Autumn Butter Classes, an annual exhibition of produce and a

butter-making competition were held. Three medals were awarded—"Gold, Silver and Bronze"—to the pupils who attended both the Cheese School and Butter Classes, for the best paper and highest marks in practical butter-making. For the pupils attending the butter-making classes only, ten Scholarships were given, each equivalent to a month's free board and tuition at the Cheese School. At the first Exhibition held the exhibits numbered about one dozen and could be arranged on a small table; now the exhibits are to be found in hundreds, and several halls are required for room to stage them.

Such is the evidence to defend the expenditure of public money, and the action taken by the County Council of Monmouthshire twenty-one years ago.

Some Pointers for Dairy Farmers.

Gleanings from an address given by Mr. R. R. Ness, to the Animal Husbandry Club.



EARLY this term Mr. R. R. Ness delivered an interesting and valuable address to the Animal Husbandry Club on Dairy Farming in Quebec. To all acquainted with the records made at the various exhibitions, Mr. Ness is known as one of our most successful dairy farmers. The point which strikes a visitor to Mr. Ness's farm is the marked uniformity of his herd. This has been accomplished by careful selection and breeding, together

with the mingling of imported stock from the best strains on the other side. The fact that Mr. Ness is a man of wide experience who exemplifies in his everyday practice the correctness of the theoretical principles made his address the more interesting and valuable.

Mr. Ness urged the importance of raising a large quantity of roughage such as corn, roots and various other soiling crops, as this not only afforded an abundance of good cheap food but also renders possible the following of a short



AGRICULTURE '15.

rotation. He also pointed out the advisability of growing only those crops which are fitted to the locality.

A good supply of feed is not everything however ; very careful attention must be given to the selection of the herd. Mr. Ness emphasized the fact that in this as in everything else every man must have an ideal, one should choose the breed he most admires and must stick to it in order to be successful. This, he said, is truer of the dairy business than of any other line of live stock, as years of careful selection and breeding are necessary to raise a standard herd. Here, too, he emphasized the importance of commodious stables, well lighted and ventilated in order to insure healthy animals.

His experience, said Mr. Ness, proved to him that September was the best time to have his cows freshen for the following reasons: He obtained larger returns from winter dairying as he got an increase of one third in the milk production ; the calves were better cared for during the first six months of their lives and their growth was not so much checked by the flies in the summer ; again, fall calves turned out at six months made better gains than spring calves ; a properly developed pure bred

calf is as valuable at six months of age as the milk produced by the cow during that period of lactation. A fourth advantage is that they would not be milking at the busiest time when help is scarce.

Mr. Ness prefers a pure dairy herd to a dual purpose herd, as he holds that it is impossible for the latter to be good milkers and good beef cattle at the same time.

In speaking of Ayrshires Mr. Ness stated that they do not develop as well here as they do in Scotland, and, therefore in order to maintain the standard of the herd it is necessary to import fresh blood from time to time. He thinks, however, that we shall soon have hardy strains in Canada, and it will then be unnecessary to import to such an extent, especially as we are now leading the Old Country from the performance standpoint.

In closing Mr. Ness gave us a few points on the rules regulating importation. He emphasized the importance of having some one on the other side to test the stock, and pointed out that this would not only facilitate matters for the importer but would also save him considerable time and money.

W. W. B., AGR., '12.

Eastern Canada and Bacon Production.

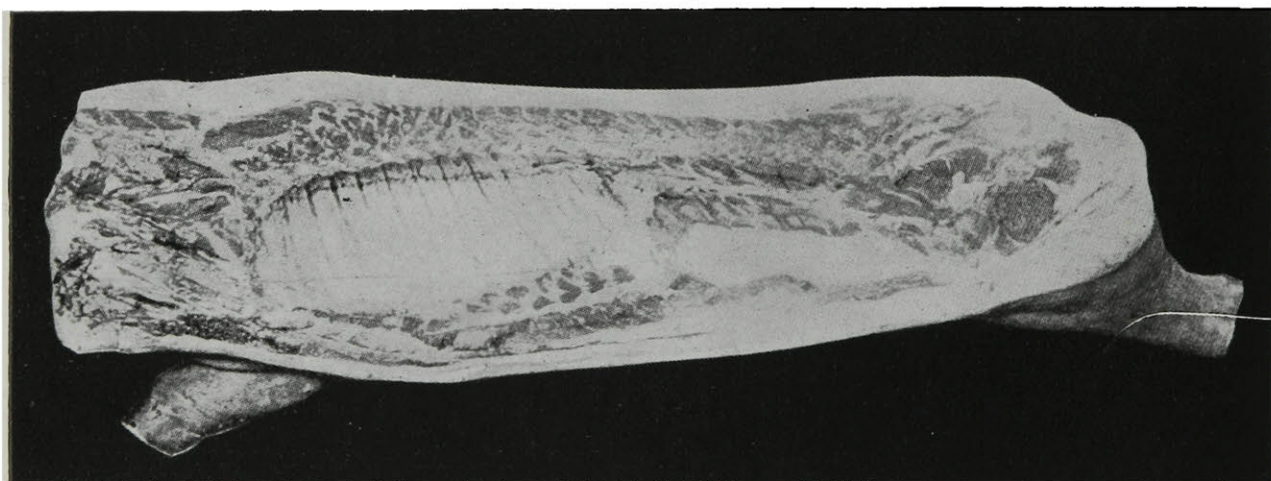
By W. J. REID, B.S.A., Assistant in Animal Husbandry.



TO those who have given attention to the progress of Agriculture during the past thirty years, the great changes that have taken place in the methods and processes of successful stock raising have become noticeable facts. In all works on agricultural science and practice, bacon production has held an important position, but more attention has been given to the feeding and establishing of a class of pigs primarily adapted to supply the

unable to see any particular merit in the bacon type of hog. In the first place, other branches of agriculture have until recently contributed in a much larger degree to the revenue of agriculture, and in the second place a lack of sympathy has been evident to those seeking to establish the industry on a scientific basis.

In the development of agriculture, grain farming and the production of beef or milk constituted a chief source of income over the greater part of culti-



NO. 1 WILTSHIRE SIDE.

growing demand for bacon than to emphasizing the tremendous possibilities in the hog business, if conducted hand in hand with our expansive dairy industry, and to problems arising from the methods of marketing the finished product.

The comparative neglect of dealing with problems other than those relating to feeding and establishment of type, may be attributed to two causes besides those arising from a natural prejudice on the part of the average feeder who is

vated and pastured land until a wider range of agricultural methods was found necessary to avoid heavy depreciations in value falling on one or more farm commodities. As time went on all departments of agriculture suffered more or less from periodic falls in market value. This includes the production of pork in general, due more to irregular stimulation of the market than to over production; yet the product of the bacon producers has always formed an economic source of income and especially

is this true when bacon and milk production are conducted as co-ordinate branches of farming.

The great expansion of dairying in Eastern Canada during recent years has as a natural sequence brought about some increase in the swine rearing industry. In this part of the country the prevailing conditions are conducive to the production of the finest grades of pork. The most common grains as barley, wheat and oats form a substantial foundation as grain feeds, either in themselves or in by-products, which combined with dairy by-products and green crops will produce a grade of pork that will compete with that of any country and at a minimum cost. However, if we take a division of Eastern Canada with Brockville, Ontario as the Western terminus we find only fourteen per cent of the total supply of hogs of the Montreal market coming from this district, which emphasizes the fact that either through lack of appreciation or ability to utilize the by-products of a well-developed dairy industry, the production of bacon is sadly neglected. Experimental evidence, gathered from the foremost authorities of Canada, Ireland and Denmark, goes to prove that best results are always obtained in pig feeding when a quantity of skim milk, buttermilk or whey is fed with suitable grain feeds in proportions not exceeding three pounds of milk, etc. to one pound of grain. With regard to the type of hog chosen no blame or prejudice can be maintained. If we compare the conditions mentioned with those of the U. S. we will find that the fat hog, as produced by the middle western and southern states, is not, and cannot be, a product of dairy farms but of great corn fields. The method used is a guarantee of economical production but

the product is one which naturally meets a cheaper market than the Canadian feeder can cater to by producing choice bacon. The English demand for prime lean bacon has long held the trade of the bacon producing countries. London is the centre of this market which although willing to pay liberal prices for suitable goods is exceedingly fastidious. In this market the most prevalent discrimination is for a fancy product and the competition which is limited to Canada, Denmark and Ireland is not only a question of facilities for cheap production but one of producing a high class article.

The class of hogs bred in Canada a decade ago was quite unsuited to the requirements of the trade and the question of introducing a hog of different conformation arose. Some enterprising breeders and packers took steps to solve the problem by importing animals of the type that the British bacon curers pronounced the ideal one for their purpose. At first the result was discouraging. The advent of the new type received recognition from the breeders who are willing to adopt something new, but met the opposing forces of long established breeders who could not recognize the value of the change to the country. Time, however, has wrought the desired effect, and these same breeders now devote their skill and energy to the modification of their breeds to meet the requirements of the market.

But even though the type is established and the conditions for production are satisfactory to the feeder, there is much to be done. Canada (which with regard to this industry is Eastern Canada) as yet only supplies about twenty per cent of the total quantity imported by Great Britain. Considering the importance of our agricultural and

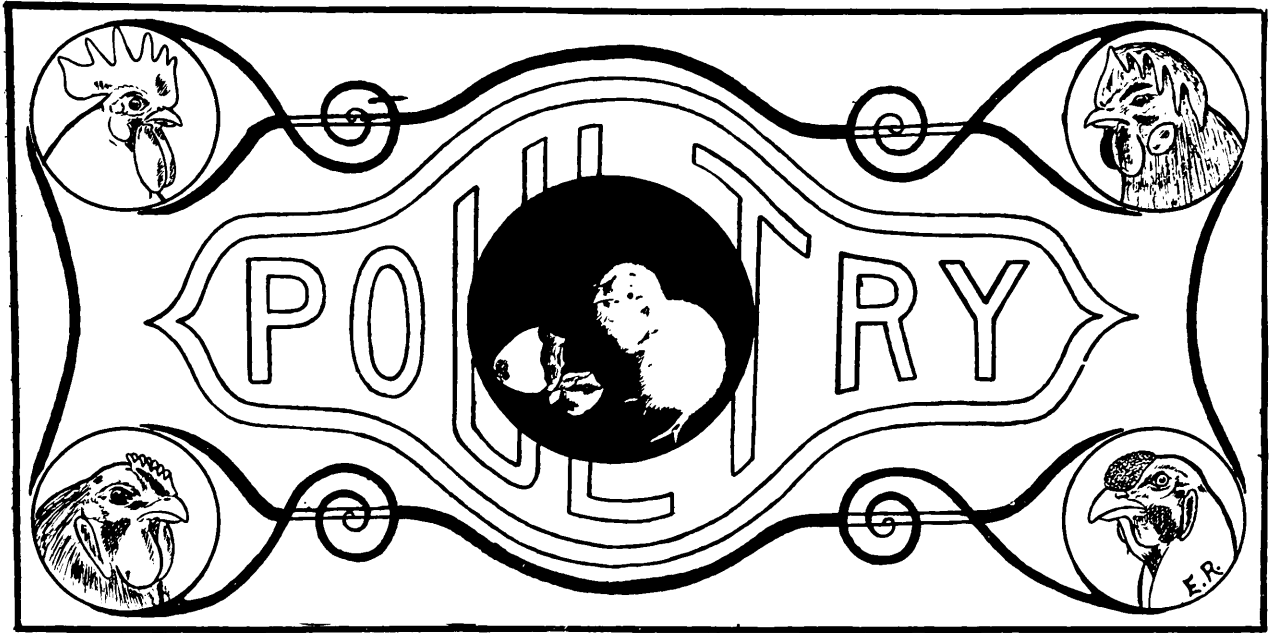
dairying industries this can scarcely be regarded as a satisfactory percentage. In fact, we are scarcely holding our position in relation to other countries. Denmark is continually improving her position while Canadian exports are practically stationary or declining.

Numerous causes may be cited for the difference in progress made in hog-raising by Canada and Denmark. In the latter country a thorough system of co-operation is established, not only in a united endeavour to produce hogs of the desired form but also to keep up a regular supply throughout the year and from year to year. In Canada it is quite different. While for a number of years the quality of the product has been improved, yet generally it is not so pronounced as it would have been with greater co-operation. Nor is the supply regular, either throughout the year or from season to season. Raising hogs when prices are high, and going out of the industry when prices are low creates a situation by which the farmers deny themselves the advantage of a good average price, and make possible the inroads of competition into the English bacon market which must have a regular supply. Such spasmodic support spells ruin for the Canadian bacon trade, because the English customer is, and will be a consistent and conservative purchaser of one brand of bacon and hence will buy from the steady producer.

Other than the need of a consistent support on the part of the feeder, many

points might be raised—if time and space permitted. But the farmer is not the only person at fault. Two years ago the Dominion Government appointed a commission to investigate the swine industry in the United Kingdom and Denmark and, by report, suggest conditions and regulations that might be imposed to raise the status of the industry in Canada. As yet we have not noticed the far-reaching effect that was anticipated. While commissioners and committees are negotiating and interceding for the furtherance of the various special industries of the country the absence of a move to support the bacon industry is noticeable. Surely an industry which offers such possibilities of development is worthy of earnest support.

The problem as it stands rests with those most closely associated with the industry. If the feeder will learn how to feed, and how to care for his animals so that the very best returns may be obtained from the business ; if by governmental intercession or co-operation the proper facilities for placing the finished product on the English market in competition with countries less handicapped by distance are arranged for ; and if, in addition, relations of confidence are maintained between packer and farmer through intelligent co-operation, there is no reason why Canadian bacon, like Canadian cheese, may not become a prime necessity to the British consumer.



The Poultry Industry of British Columbia.

By M. A. JULL, B.S.A., Manager, Poultry Department.



BRITISH Columbia, the most glorious province of the Dominion, with its area of 395,000 square miles, a coast line of 7,000 miles and the extent of inland navigable waters totalling 2,500 miles, has approximately 70,000,000 acres of arable and pasture land.

Notwithstanding all the seeming greatness of British Columbia and the possibilities of development in agricultural production, it is surprising indeed that the production of staple food products forms only a small portion of the necessities of the people. It is in fruit alone that British Columbia is an exporter and that to the extent of approximately one million dollars' worth only annually. At the same time large quantities of fruit are imported from Washington, Oregon and California. The importations of butter and cheese approximate several million dollars' worth annually, and are brought

in chiefly from New Zealand, Australia, Ontario, Quebec and the Prairie Provinces. Enormous importations of New Zealand mutton are made annually, while the chief sources of beef and bacon supply are the Prairie Provinces and the Middle West States. The importations of eggs assumes astonishing amounts, and if the hen that laid a particular egg, of the many millions imported, was to be located, she might be found in any one of the five provinces immediately east of the Rockies, or in one of the Middle West States, or in one of the Pacific Coast States, or even in China. British Columbia also has a large field from which she draws her supply of dressed poultry.

The large importations of food products and the fitness of the country for all branches of agriculture, which has been demonstrated by actual results secured, do not seem to argue well for the past development of the agricultural industry.

Agriculture, nevertheless, is in a transition stage, and while, considering the poultry industry, the supply of eggs and dressed poultry has not kept pace with the constant and increasing demand, the increase in production has been considerable. As nearly as can be determined, the increase in home production has doubled within the last two years, and for the last year amounted to approximately \$1,500,000. The increase in im-

tations in 1911 increased enormously over importations in 1910, although for the same period home production increased considerably, still the increased production did not affect seriously the market situation at any time. This is a serious state of affairs, and one which will meet with but little improvement for some time yet.

Aside from the fact that the Province imported last year over \$2,000,000 worth



TURKEY RAISING IN BRITISH COLUMBIA.

portations during the last two years, was over \$1,000,000, the total importations for last year being over \$4,000,000, of which egg importations amounted to over \$2,000,000. A large majority of the Province's population is a consuming class, while only comparatively few are producers, and the consumers are increasing more rapidly than the producers. That explains why egg importa-

of eggs, it must be remembered that transportation charges were borne, duty was paid at the rate of 3 cents a dozen on importations from the United States, which were approximately 25 per cent. of the total importations, and there was a direct loss through breaks, cracks, spots and moulds, there being about six spots and moulds per case. Previous to 1909 practically no attention whatever

was given the development of the industry on the part of the Government; now several thousand dollars are expended in promoting and developing this important branch of agriculture. Less than three years ago there were but six local poultry associations in the more settled parts of the Province, while now the number of associations totals over twenty and are operating in every part of the Province. The co-operative question is receiving the attention of many of the associations, and it is expected that considerable advancement will be made along improved co-operative methods. The more important poultry centres of the Province are to be found in the southern part of Vancouver Island, on the Lower Mainland, more particularly in the districts surrounding Vancouver and New Westminster, throughout the entire length of the Fraser Valley, in the Okanagan Valley, in East and West Kootenay, and in the boundary country. It is surprising indeed to note the increased interest being taken in poultry raising. So rapidly is the industry developing that in many sections the flocks are invading the forests. The most popular varieties of fowls kept on the poultry plants and farms are the Single-comb White and Brown Leghorns, the Barred and White Plymouth Rocks, the White Wyandotte, the Rhode Island Red, and the Buff and White Orpingtons. Houdans, Faverolles and Dorkings are also quite popular, which is accounted for largely by the large number of Englishmen in the Province. There are more White Leghorns raised than any other variety of fowl, and on some plants on the coast upwards of thousands of Leghorns are being raised annually.

The excellent egg market, together with the comparatively mild climate of the Lower Mainland and Vancouver Is-

land, stimulates considerably the Leghorn industry. In the upper country, where the winters are more severe, the general-purpose breeds are more popular. Naturally, the greater distance from the central markets necessitates greater consideration being given to the question of the production of table poultry rather than specializing in egg production.

Poultry plants, where eggs and other poultry produce form the basis of returns, are quite successful. Conditions seem to allow of intensive specialization, at the same time excellent profits are being made on farms of mixed husbandry. The returns from the flock add materially to the income of the fruit-grower, the dairyman, or even the man who is in the process of clearing his land.

The climate of the Province, as a whole, is quite favourable to poultry raising, and chickens can be raised everywhere. In the Wet Belt, the raising of ducks and geese proves profitable, while the Dry Belt is specially adapted to turkey raising. The climatic conditions are such that fowls may be kept under more or less natural conditions and therefore the best.

The average price paid per dozen for eggs, in 1905, was 30 cents, and this has increased until now the average price in some parts reaches 50 cents per dozen. The production of eggs is the chief aim of the British Columbia poultryman, and it is with this end of the business that we are most interested.

It has been noted previously that the Province is importing large quantities of eggs, and on these importations she is losing vast sums of money. As a matter of fact, she should be an exporter rather than an importer, of poultry products. It is highly improbable, however, that the supply will meet the constant and increasing demand for some time

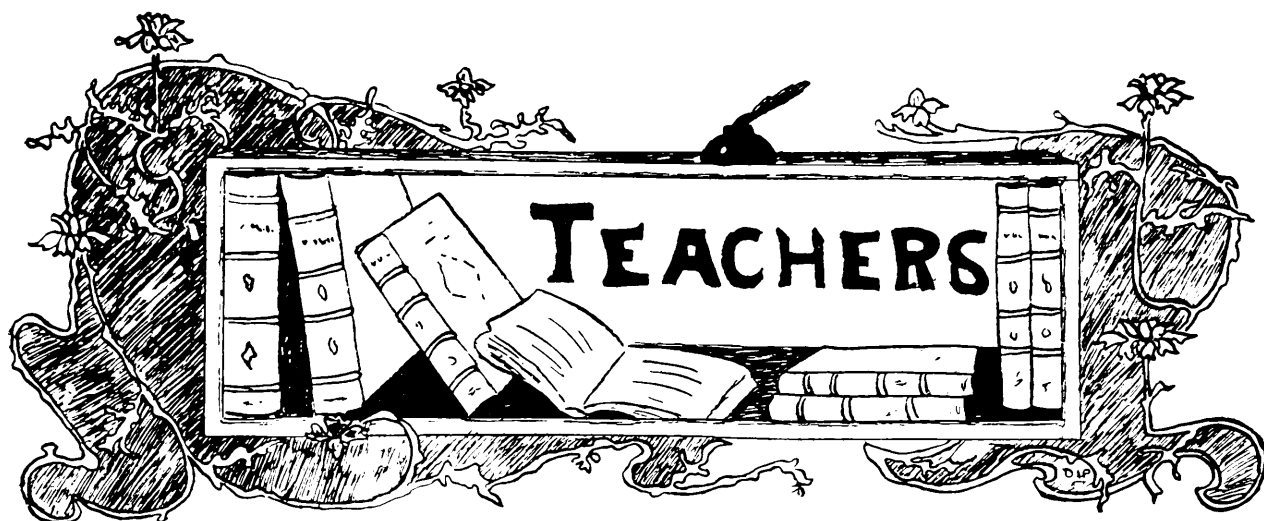
to come, and under present conditions improved methods of marketing are wanting.

What is most needed among the poultrymen is education. It takes familiarity with proper methods of production, handling and marketing to place a perfect egg on the table of the consumer. The best method to bring about a superior quality and better care is by buying on the "loss-off" method rather than on the old "case-count" method. The dealer will be able to buy on the quality basis when the poultrymen co-operate. The greatest drawback to co-operation among poultrymen is the lack of sufficient quantities. The poultry industry has not been sufficiently developed, and a sufficient number of eggs is not being produced in any one centre, with the exception of one or two places, to justify the expenses in connection with a co-operative scheme. The Cowichan Creamery at Duncan, last year, handled 81,706 dozen eggs at a cost of 4.03 cents per dozen. The cost of handling was rather high, which, of course, is due largely to the comparatively small number of eggs handled. In 1909 Petaluma exported 7,159,481 dozen eggs through the Petaluma Egg Exchange at a cost of a little over 2 cents a dozen. The Petaluma Egg Exchange handles only a portion of the country's output. The eggs received from the producers are graded into three grades—Nos. 1, 2, and 3. All eggs passing into No. 1 grade must be spotlessly clean and weigh 1 and 5-6 ounces. This makes one dozen weigh 22 ounces, which weight was adopted as the commercial standard, although the

standard weight is 2 ounces per egg, or 24 ounces per dozen. No. 2 grade are smaller eggs, while No. 3 are cull and cracks, and are used locally. The difference in price between grades No. 1 and No. 2 varies considerably, from 5 to 20 cents a dozen. One only needs to watch the steady growth of the poultry industry at Petaluma to realize the importance of co-operation in the selling of the produce from the flocks.

Co-operation is the fundamental principle underlying success in the marketing of eggs in British Columbia, but any project directed towards bringing the producer and consumer to a better understanding of the needs of each, and bringing the producer and dealer to adopt some system of co-operation of buying, must be very carefully undertaken. The egg-circle method of gathering eggs, as adopted in parts of Ontario, would not be applicable in British Columbia. The most successful practical method is to have the eggs gathered through the creamery. The success of the Cowichan Creamery is assured as far as the handling of eggs is concerned, and the results of the method adopted there show an increase in the number of farmers keeping poultry, greatly increased flocks, better methods of caring for the fowls, improved methods in handling the eggs, and consequently more profit per bird.

Education and organization are stepping-stones to co-operation, and co-operation is the key note to the situation. The poultry industry of British Columbia needs no vain boasting to reassure itself.



Newfoundland: Its Educational System

By PROF. A. W. KNEELAND, M.A., B.C.L.



THE progress, prosperity and enlightenment of a country may be fairly well gauged by the state of its schools; and the amount of taxation to which a people is willing to submit for the purpose of fitting its youth for life, is pretty fairly taken to measure the earning power of its people.

The State of Massachusetts pays the largest amount per pupil in the form of taxes direct and indirect; and the people of Massachusetts earn more per head than those of any other state of the Union.

Newfoundland does not pay the least per pupil, of any part of North America; but the amount is very small; and it is not raised in such a way as to make the people feel that they have any direct responsibility for the education of their children.

As a matter of fact, the educational system of "The Ancient Colony" is unique in many respects, though in indifference to the great cause of education it by no means stands alone.

As in my former letter, I showed that many of the customs of the islanders were strange to us, so in the present I hope to point out the fact that its educational system is a somewhat peculiar one.

In the first place, it is denominational throughout, each denomination having its own superintendent, teachers, schools and regulations governing them, as much as though they lived in different countries, save in that all must report to the Government; and all depend upon the same for means to carry on their work.

In our study, we were not long in discovering the far-reaching results of the system, both for good and ill, to the rising generation of Newfoundlanders.

In the first place, we found it to be the enemy of economy, as schools are multiplied unnecessarily to meet the interests of denominational teaching, even in small villages where a single school would be sufficient for all legitimate demands.

Thus, in cost of school-houses, teachers' salaries and in the number of teach-

ers required, the system is at once wasteful and demoralizing in its effect upon the habits of thought of the younger members of the community.

Again, the system breeds sectionalism and bigotry.

There is no place where hydra-headed bigotry is so soon destroyed or robbed of his venom as the public school where boys learn to see good in all other boys, even though they subscribe to a different creed; and there is no surer means of perpetuating religious animosities that find their way into all walks of life, to sour and embitter, than schools of the character found in Newfoundland.

Co-operation to secure better schools, is practically unknown, though we did find some Methodist scholars at New Perlican, taught by the Church of England teacher.

Again, as already hinted, this system makes it almost impossible to provide an effective system of superior schools, owing to the squandering of money upon many small and unsatisfactory elementary schools, when a third or half the number would be ample.

As a consequence, very few of the youth of the island receive more than the rudiments of an English education, the bare ability to read and write indifferently being the rule rather than the exception; and this is the more regrettable when one comes to learn the remarkable intelligence of the natives of this iron-bound island.

True in spite of the system there are a few superior schools doing fair work, as good as one could expect to find when one considers that the highest salary paid in the island to a master of a superior school, is \$650.00, paid to L. B. Clarke, of Grand Bank.

The Brothers maintain a fairly good superior R. C. school in St. John's, called

St. Bonaventure's College, where work up to matriculation is carried on; but when one recalls that the entire grant for superior education in 1910, was \$9,194.13, and that there are no school taxes, one does not wonder at the fewness and poverty of the superior schools.

So also the Protestant denominations maintain so-called superior schools at various points; but the number is so small, the distances so great and the salaries so inadequate, that very few have the advantage of secondary education.

This naturally leads me to speak of the smallness of salaries as one of the regrettable results of this system of schools.

As I have said, the highest salary paid in the island, is paid at Grand Bank, where the principal receives \$650.00, while the highest paid in the city of St. John's, is \$641.00.

There are more than one hundred schools where the salary from all sources is less than \$90.00 per annum, and that for a full year as we are persistently informed.

Permit me to mention a few instances in support of this statement:—

Mr. W. Hatcher, of La Poile school, receives \$75.00 a year; Miss E. Pippy, of Pouch Cove, \$36.00; Nathan Cafe, of Victoria Village, \$30.00; Peter Moores of Adam's Cove, \$18.00; Mr. J. W. Noseworthy, of Paradise, \$64.58.

From my notes, I could supply more than a hundred other similar cases; but I forbear.

Suffice it to say, that so long as this system of denominational schools prevails, there can be little or no amelioration of the position of the teacher in this old colony; and just so long will the course of education languish.

It must not, however, be supposed that the system is all bad, for it has its advantages:

In the first place, it secures an intense loyalty to their churches, on the part of the youth of the land; and while the bigotry that it surely breeds, is deplorable, denominational loyalty is something worth striving for in these days of somewhat lax religious principles.

Again, it probably is a factor in the building up of that sturdy honesty for which the islanders are so widely noted, for there is less association of good with bad than there would be in a system of public schools.

Once more, it permits a progressive denomination to advance at its own gait, without the drag of the unprogressive; and so for that denomination, at least, it possibly opens the door to more rapid advancement than would otherwise be possible.

One of the unique features of this educational system is the absence of all taxation for school purposes, the schools being supported entirely by (a) grants from the Government, (b) fees of pupils, which are very small, and (c) grants made from the funds of the various denominations.

Probably such sources of revenue only are possible to sectarian schools; but in this fact one sees the greatest hindrance to progress.

The total amount voted for all educational purposes, including pensions in 1910, was about \$293,000.00.

A very large number of men are employed as teachers in the Newfoundland

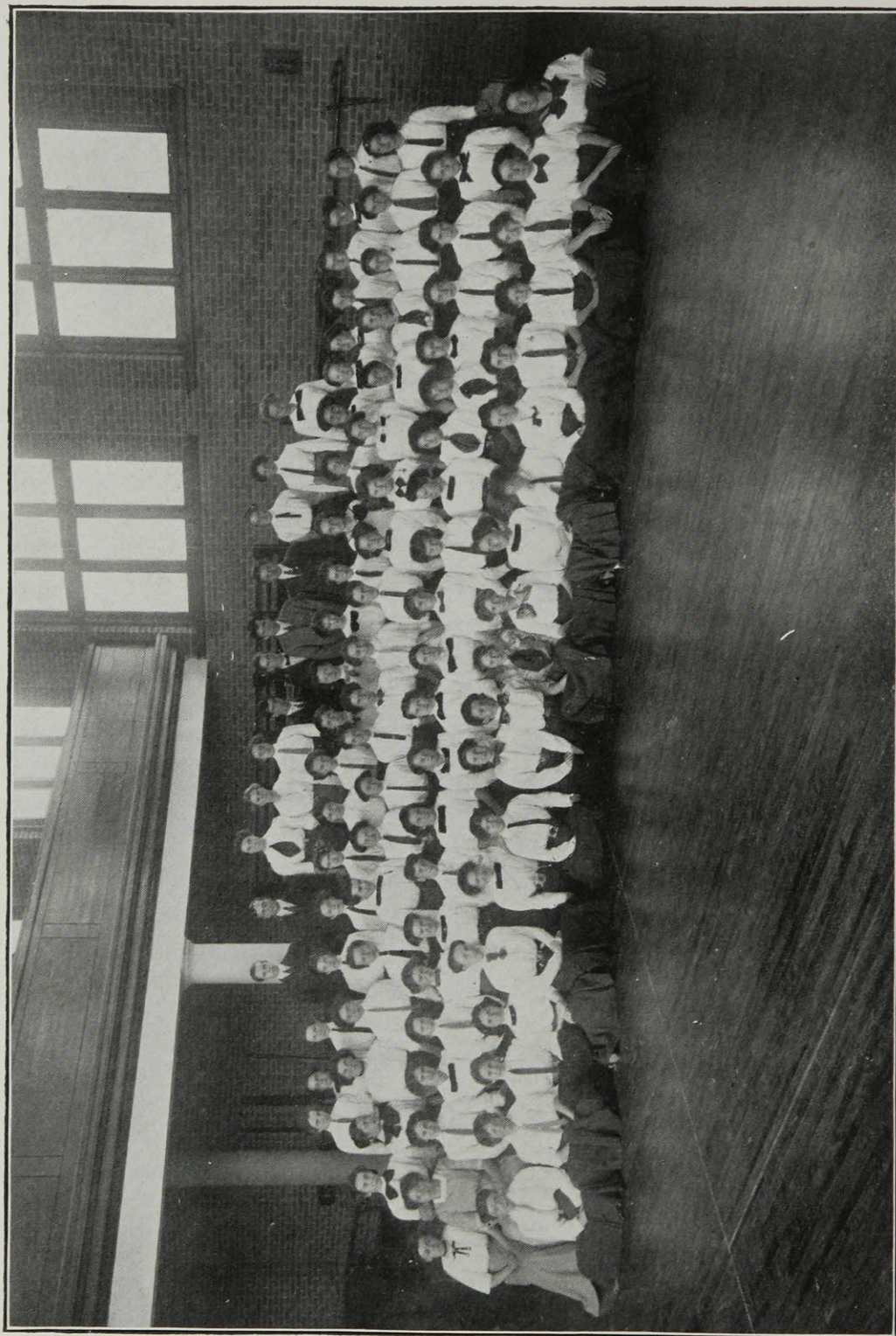
schools, probably a larger percentage than in any other English-speaking country, in spite of the small salaries paid; and this, if we accept the dictum of some modern critics, is a hopeful sign.

The superintendent of the Church of England schools plaintively refers to the fact that men do not stay in the profession, and calls on the Government for larger grants so that at least a few positions worth "\$800.00 a year" might be available as an inducement for men to stay in the ranks.

As I see it, annexation to the Dominion, and the consequent advance in all lines, a common school system with salaries commensurate with the work to be done, and the establishment of a university to gather in the talented sons and daughters of the island, can alone rescue the people from what is at present a most hopeless condition from the educational standpoint.

There seems to be no scarcity of teachers in Newfoundland; but one of the superintendents makes a novel proposition to the Government, in his last report; to wit, the drafting into short-time schools of young fishermen who are now idle for many months of the year.

Lord Durham, in his celebrated report upon Canadian affairs after the Rebellion of 1837-1838, says that one cause of the rebellion was the employment by the Government of teachers who could neither read nor write. This ingenious proposal might not result in such a condition of affairs; but its adoption would most certainly result in an approach to the danger-line.



SCHOOL FOR TEACHERS, MODEL CLASS.

The University Settlement of Montreal.



THIS is the latest activity to bear the name of Old McGill. Very many universities have their "settlements" which serve a double purpose: first as a centre for friendly intercourse between the more or less fortunate of the citizens, and second as a centre of study of the conditions of life in industrial communities. It is a far cry from Macdonald to Dufferin Square, though many an old student of the School for Teachers has experienced that sharp change of environment. As long ago as 1891 some alumnae of McGill started what was practically a settlement. It centered in a decent lunch-room (restaurants were fewer then) for working-girls, and clubs and classes of various kind gathered about it. Later some McGill men started a boys' club in co-operation. These clubs had a chequered history, chiefly because they had no settled home; but there was in them the germ which was bound to grow. In May, 1910 two houses (159-161 Dorchester St. W.) were leased to become the first settlement in Montreal under the title of the University Settlement. Then the classes grew fast and a Head-worker of ability and experience was engaged to give all her time, because no volunteers however devoted, could cope with the growing demand. The old children brought new ones, and new workers offered help. The people of the neighbourhood began to trust their new friends and understand them a little.

Soon the houses were crowded out and additional rooms had to be taken, which are now used for a Kindergarten and a well used library. Then fresh rooms were required for the Boy Scouts, then a fresh room again for gymnasium and entertainments. So the work spread till now some 40 sessions a week are held in the various buildings—including carpentry and basketmaking, millinery, typewriting, sewing, cooking—a busy hive of happy and profitable industry, employing in all some 300 children who would otherwise be confined to the scratch amusements of the gutter. A large proportion (some 65 per cent) of these children are immigrants of alien race: one of the noblest functions of the settlement is to help them to develop into real good Canadian citizens. We are all of us keen on conservation of our natural resources in wood and water and land. The next great field for conservation is that of human life in town and country. Perhaps hardly any field demands it so urgently as does that of the immigrant children—the little aliens of to-day, coming wide-eyed into a new country with new manners and standards of life, with new opportunities and new dangers. These are the citizens of to-morrow, a vital element in the future of our nation.

The Settlement, then, is one of the nation-building forces, and we have reason to be proud of its connection with the University.

J. A. D.



SCHOOL FOR TEACHERS, ELEMENTARY CLASS.

Bird-Life at Macdonald College.

By JOHN BRITTAIN, D.Sc.



AFTER the long silences of winter everyone is glad to hear again the songs and calls of the migratory birds returning to their home land, to build their nests and rear their young.

Spring is by far the best season to begin the study of these gifted and graceful creatures. Then return not only the birds which nest in this vicinity, but thousands which pass this way to regions farther north. Birds are much more easily observed, too, before the deciduous trees are in leaf, and as a rule they are more approachable than in summer or autumn.

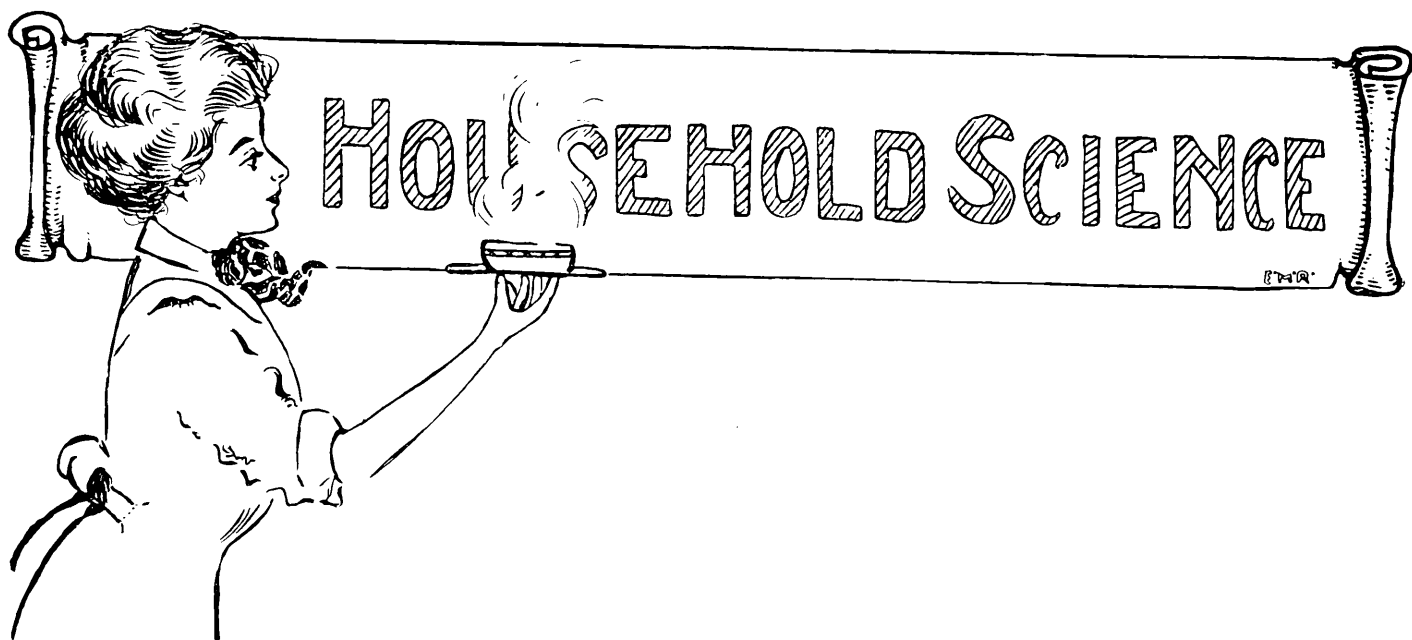
The wave of migration rises gradually from its beginnings in March to its highest point, about the middle of May.

Of the land birds, the Horned Lark is perhaps the earliest arrival. The Robin, Song Sparrow, Junco, Phoebe Bird, and several species of Blackbirds, reach us in the early part of April, sometimes a little before. The Bluebird may appear about this time. The Vesper Sparrow follows soon after the Song Sparrow, but the little Chipping Sparrow, the White-Throated Sparrow, the Hermit Thrush, the Veery and the Flicker, may not be seen or heard till about the first of May. The Tree Swallow may be seen perched on the telephone wires about this time. In the early days of May the curious note of the Least Flycatcher will be quite frequent among the trees along Maple Avenue, and Summer Warblers may be seen darting among the still leafless branches. We shall probably have to wait for the Kingbird, the Catbird, and the Bobolink till about the middle of May.

The nest of the Horned Lark may be found on the Campus and in the open fields early in April, and the parent birds may be seen feeding their young about May-day. The Vesper Sparrow also makes its nest on the ground near the College quite early. Many Chipping Sparrows build in the shrubs close to the Main Building, while Robins, Purple Martins, and Bluebirds also nest close to the College.

The Horned Lark has a rare treat in store for the enthusiastic student. On some sunny morning in Spring the bird may be seen to rise almost directly upward into the air till nearly out of sight, and from that dizzy height his song may be heard, not equal to the skylark's, but sweet and clear. This habit proves that the Horned Lark is akin to the skylark of Europe, and indicates that the custom is of long standing in this family. Of course, it would be vain to expect this performance from a Meadow Lark, which bird is related to the American Blackbirds and the Bobolink.

Only a few of the birds which return in Spring and spend the Summer in this locality have been mentioned here by name, but enough has been written to show that the students at Macdonald College have an excellent opportunity for the study of birds. The beginner will do well the first season if he learns to recognize in the field, by eye or ear, as many as twenty species, and discovers a little about the haunts and customs of each; and he will have laid the foundation of a habit, which, if persisted in, will contribute much to his good health and the simple joys of life.



Some Students in Domestic Science.

A Character Sketch.



REFLECTION upon the assets with which different students approach a course in Domestic Science or Home Economics may indicate reasons for the wide range of accomplishment and efficiency among the members of the graduating classes.

The School provides the same teachers and the same course of study for all. One is forced back upon the personal factor of the student at entrance as an integral part of the graduate's equipment.

True, there have been conversions under instruction. Some of these have been short-lived. In other cases a bright present has been drawn out from the past and sweet serviceableness of life has been established.

The opening day of term shows that there are those who attach no importance to the prompt keeping of business engagements; that there are those who will pull wires to get a better room than their

standing merits; and that there are those who are capable of evading the vaccination regulations. The girl who, waiting at the end of a long line for registration, calls out: "Miss Smith, do you think you could take me now? I am tired," does not reflect that she is sounding her own knell of selfishness. The solitaires on the third fingers of left hands are dim beside these other indicators of possibilities among the new-comers.

Among the younger girls there are those who have had no home experience. A girl of eighteen years, who has been continuously at school, is not likely to have had much experience in house-keeping. There are wise mothers who place this part of education to come at a later date, because ordinary so-called school-work is exacting if a standard is aimed at, and if proper hours for sleep and exercise are maintained. Even when it is remembered that help is kept in only ten per cent. of the total number of Can-

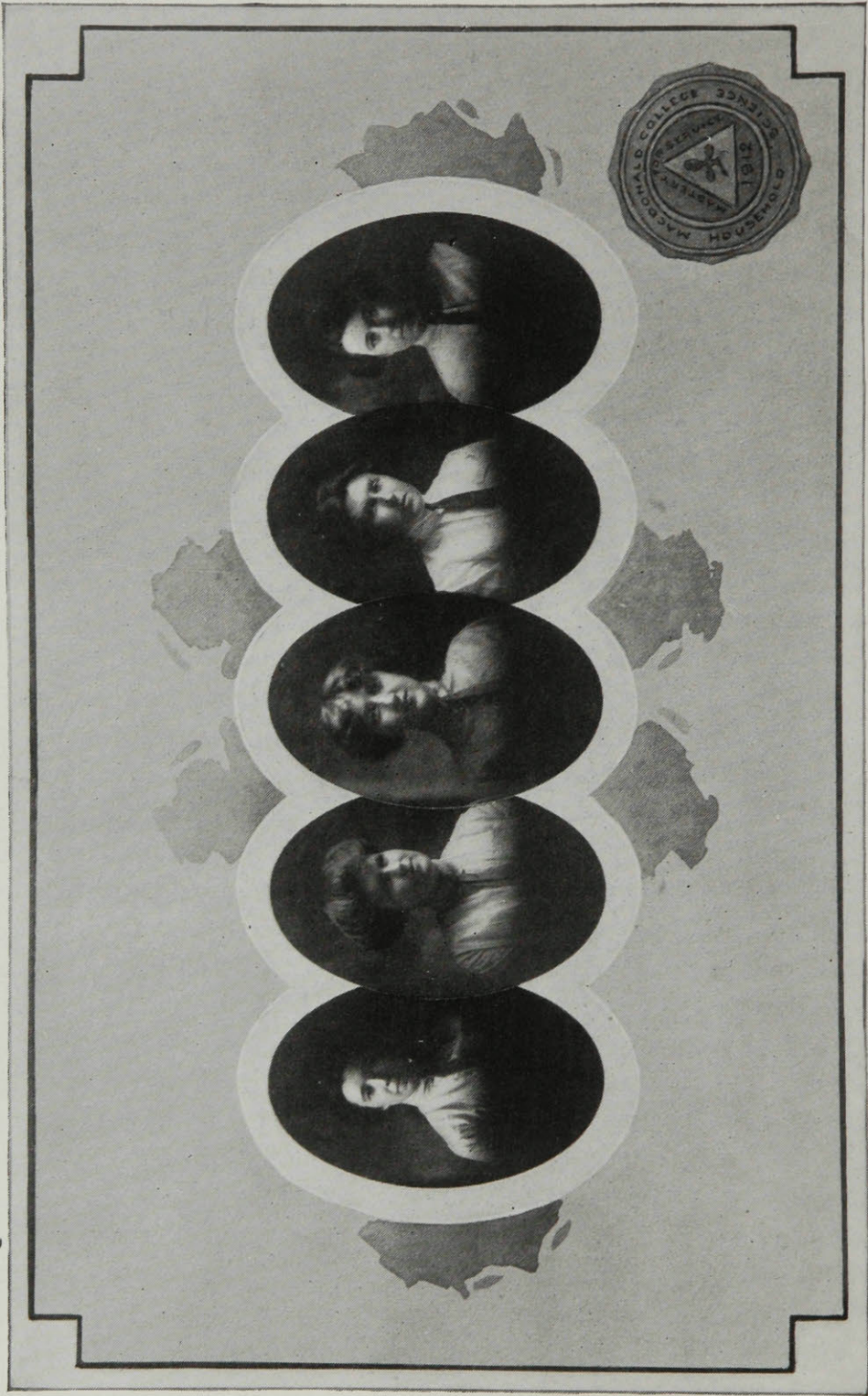
adian homes this ignorance can be understood. If, however, a girl comes from a home where there is happiness and good management, ignorant of house-work, but with a general education of matriculation standard and respect for her fundamental profession of home-making, she should be able in one year, or better, in two years' special training, to have a foundation laid that will be valuable for her work in her father's home or in her own. It should, if desirable, serve her as a wage-earning basis.

A type of the girl who "never did a thing at home"—"Just hates house-work." She is so pretty that one wonders at the word "hate" finding a place in her vocabulary. She has been brought up at good boarding-schools, but she has no academic standing. She plays a few waltzes, dances lackadaisically, has expensive clothes and sets store by her code of manners for evening parties; while at Domestic Science School, she filled the role of decorated, flirting statuary vivante, and left ungraduated.

The little fair-haired girl has "always helped mother." Her eyes are very blue and very steady, her manners reserved and respectful. Breeding and delicacy are more evidently her garments than even the plain old-fashioned suit that you forget as soon as you hear her gentle voice. Then you remember that it is her father who has given away in means and in time, for benevolences, what would have made his family wealthy. Experience? Yes! She can darn a bit, and sew and knit a bit, and has done a little cooking. She took entire care of her own room, and of the flowers in the drawing-room, and she always got Sunday tea quite alone; and then, too, "she helped mother." Unconsciously the daughter interprets the quality of the mother.

Another girl of about twenty years, with firm lips and resolute eyes, has been a cook and has earned enough money with what she will be able to earn in holidays to take a two-years' course. Her appearance is most attractive. It is an interesting study in human nature to later hear the gossips of the class, some of whom have leisure for everything but study, deplore her "lack of early training" with uncondescending superiority. Thought flies to wonder why it is less honorable to prepare food for the healthy than for the diseased. Why is a lady's domestic laboratory less admirable than her husband's office? If any old work, in any old place and any old clothes are good enough at home, then the question is answered. The absorbability of the girl who brought such valuable experience as a matriculant was unusual and her course was filled with promise. The day after she knew her soul, she admitted with tears in her shining eyes that she knew we had been imposed upon at times because she had been "only a cook." Her admission drew the tribute that her brave, sensitive nature deserved.

The farm sent a woman of thirty. Her shoulders are broad, her hair abundant and smooth, her clothing fits her loosely, and common sense is her motto. She has milked, and made butter, baked bread, done laundry work and kept the vegetable and flower gardens. "Sewing?" Yes, last year she had one dress made by a dress-maker because there was much sickness among the neighbors, they required help after the work of the day was done. But she is going to learn some better methods at the Domestic Science School. In the class-room her questions were most intelligent. In residence, the accomplishment of her hands was a marvel to one of those rooming near, whose hair was



SCHOOL OF HOUSEHOLD SCIENCE, CLASS '12.

curled twice a day and whose numerous wardrobe was sent home for mending. The Women's Institute staff is richer since she joined them. Her petitions that the daughters of the farm homes should be given opportunities are eloquent.

Strength is the outstanding characteristic of a big young woman with eyes like shining stars. She is a child of yesterday as well as of to-day. Her grandparents, in pioneer days, were known for culture, hospitality, and courtesy. Her father is a warrior in the interests of municipal sanitation, and her own ability is shown in her entrance record. She is an undergraduate in Arts, and a graduate in Music. Life is buoyant in her walking, easy in her dancing, happy in her speech, and delirious in her laughter. The confidence she wins among the stu-

dents is shown by the positions into which they vote her. Her class work is good, but only in administration does she lead. Does she want to be head? Living is so much more to her than class standing. She is easily first citizen in Residence. Her friendships are all-inclusive, and the dislike of any living thing in the Heavens above, the Earth beneath or the waters under the earth, seems to be impossible to her affectionate strong nature. Yet, the accusation of love of power and domination was brought against her! But the testimony that remained after she went into settlement work, was to the versatility of her gifts and to her faithfulness. Is it because love conquers at the last that they who doubted came to love her?

N. M.

An Appreciation.

By E. W. MACMURRAY, Victoria, B.C.



IN 1907 I had the privilege and pleasure of a Nature Study course at Macdonald Institute, Guelph, Ontario. The nature students were associated in Macdonald Hall with the students of Domestic Science. We always met a number of them in the dining-room. They talked learnedly of proteids and carbohydrates, of well-balanced rations, and other things equally incomprehensible to the uninitiated. I had always regarded eating as a rather pleasant pastime, but on becoming acquainted with the fact that rations needed to be

well balanced, I learned to lift spoon and fork with a certain hesitancy, fearing lest dread results should follow the assimilation of food ignorantly and injudiciously selected without due regard to "balance." Happy she who is cognizant of the chemical components of the contents of her spoon.

Were envy not a weakness, the moral weakness that refuses to accept the human lot assigned one, I should most heartily envy those who have been fortunate enough to gain an insight into the mysteries of the science domestic.

It is glorious to know, and to know

how. The problem that perplexes the majority of good people is that of knowing how. Ignorance is the cause of many failures in life. How many cakes and costumes, puddings and paintings, fritters and frills have been made with the best of intentions and yet have miserably fallen short of the ideal. How many hospitable and generous souls, desiring to place before their guests only the best and daintiest, have been obliged to confess to themselves the inferiority of what their hands have prepared.

A home is full of perplexing problems which love alone is unable to solve. How grateful should be the woman who is able to minister to the physical needs of her household in deft and intelligent ways, conscious that her efforts are calculated to secure the best possible results. And what an amount of nervous energy is conserved when one acts with the assured confidence that what one does is not an experiment which may or may not fail, but the obedience to law which, in every sphere of life, means success.

The other evening, I heard a woman say: "What a saving it would be if one could trim one's own hats."

"Yes," replied her companion, "I have so often wished to be able to cover a hat shape. I think it must be very difficult to get velvet or silk to set properly on the large shapes now in vogue."

The desire to do a thing means in the majority of cases the ability to do it. The woman who feels a desire to trim her own hats just needs to be taught how, and there is then in store for her the untold bliss of being able to deck out her own headgear in a rational and becoming manner, and the consciousness that she is able to walk abroad with confidence in the sanity of her appearance. Just last night I read of classes being formed in San Francisco for the study of millinery,

as a protest against the high prices demanded for hats. A French milliner is in charge, and the classes include among their members daughters of millionaires.

One of the problems I remember hearing the students of Macdonald Hall discussing, was that of making so much money provide for so many needs. Domestic Science students are happy in being taught to grapple with the problem of economy. In the evening paper before me a writer speaks of there being such a thing as raising the standard of living unwisely, and instances a young woman married but a short time who boasts of towels that cost a dollar apiece, sheets seven dollars a pair, and tablecloths worth twelve and fifteen dollars. Being afraid of "harsh lines," she always pays twenty-five dollars for the tailoring of her suits, and moreover regards grape fruit as a necessary breakfast food. The outcome of course is the problem of unpaid bills. Some one has suggested that the way we spend our money is an index of religious convictions. Are we not likely to misjudge those who err through ignorance? Surely there is need for knowledge to "grow from more to more."

Two years ago in my home in the East I lived next door to a girl who had spent a year at Macdonald College. She showed me her needlework. Dress, hat and underclothing were all exquisitely made. What delighted me most was a book containing samples of every possible kind of stitch. It was a text-book on how to make and mend everything. All sorts of patches were in evidence, or rather the way to conceal them, for so beautifully was the work done that patches were undetectable. How often had I tried to patch, and how utterly had I failed to produce what was seemly, and how thoroughly I had hated what was

unsightly! If only one knew how to mend, how bravely one could face the wear and tear of life.

One of the lessons of life that everyone needs to learn is that of the dignity of labor. The woman who has learned the art of washing, and fears not to plunge her hands into a tub of suds, is less likely to regard the female portion of the human race as having been divided into: Class, Mistress; Subclass, Maid.

I think homes were meant to be the spots on earth most closely resembling Heaven, places where faith, hope and love are nurtured and nourished, and blossom into all the loveliness that lurks in the human heart divine.

It is a privilege to have a home of one's own, to direct all its appointments, to control its doings. Personality is so easily stamped on one's surroundings, they so soon reflect the character of the presiding genius. I don't think the majority of women who have homes half appreciate their privileges. They don't realize that it is truly theirs to sway the sceptre in a queenly way.

Mending, baking, blackleading, washing and sweeping are not the end of home life; higher and holier ideals face a woman in a home. But how much energy is saved for what is higher and holier when one is skilled in the technique of the kitchen and workroom.

Short Course Impressions.



IF one were asked "What makes Macdonald unique?" one would answer "Her infinite variety and her practical usefulness." These are, at any rate, the salient characteristics that first impress a Short Course girl, because Macdonald accepts any student of either sex, of any age, position, or ability, for courses ranging from two weeks' sound training in Horticulture or Poultry to two years in professional Housekeeping or four years in Agriculture. Few are the schools that have sufficiently rid themselves of the incubus of stereotyped educational forms to give that training which will be of the greatest definite value to the greatest number of people in everyday life. "Man cannot live by bread alone," but he very certainly cannot live without

bread and all it stands for figuratively, and it is with all these things that Macdonald deals, from the planting of the seed to the baking of the loaves.

We of the Short Course are here long enough to have this strike us very forcibly. We like to think that we belong to the College and have some part in its community life, that we even, perhaps, contribute our share towards that imponderable thing, college spirit, which makes or mars every college.

That is the serious side of our impressions. But we carry away with us delightful memories of college society—receptions, teas, concerts, entertainments, dances, and many pleasant outings on snowshoes or on the ice. As to our work—it is a far cry from the first morning when we are initiated



SCHOOL OF HOUSEHOLD SCIENCE, CLASS '13.

into the mystery of oxygenating a stove, or ironing table-linen in a screen fold, to that last exhibition day when we nonchalantly oxygenate flaky pastry (a highly scientific matter, I assure you), or display the finished product of our Manual Training lessons, all glorious with shellac and wax, and pilot visitors to the alluring showroom of the Household Science Millinery Opening. We

you believe a three frame Brussels is the best Axminster. Not to mention the attainments of zealous souls who can run incubators or bee-hives, make Coulommier cheese or cuttings from roses, blacklead a stove or scientifically dissect half a beef carcass.

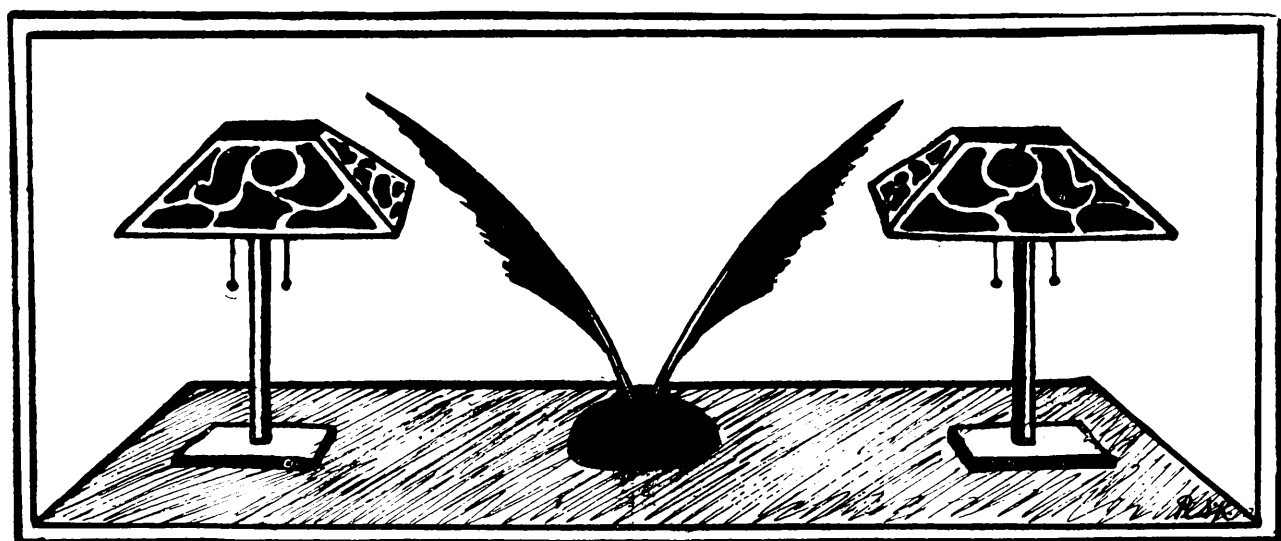
In conclusion may I say that we feel the utmost gratitude towards the Faculty of Macdonald who have made it



WINTER SHORT COURSE.

look back with amazement on all we have learned—how to feed the young idea on a scientific blend of protein and carbo-hydrates, how to bandage sprained ankles and launder lace frocks, how to know “Louis Seize” from “Chippendale, how to apply whiting to silver and button holes to garments, how to confute the guileful shopman who would have

possible for us to avail ourselves of this *multum in parvo*. To our fellow students we say good-bye, with many memories of their kindness to us as newcomers. To the new Short Course we give a hearty welcome, hoping that they will prove, as have we, the truth of the Short Course motto, “Each for the joy of the working.”



Under the Desk Lamp.

SPRING.



ONCE again this season of mirth, with its cheerful associations, has made its appearance to awaken us from our Winter sleep.

There seems to be a freshness that comes over everything which is never present with any other season of the year. Beast, bird, and insect, all seem to sparkle with a joy which tells of the warm and beautiful days to come. Not so does the Macdonald student, however; for him a dreary time is at hand. He sees away in the distance the sad days to come. Many the sleepless nights that he spends. He hath nightmares, who never had them before. Away in room 148 or 175, or in some other room, he waits for the awful hour to appear; he sees the sage professor, whose head is well-nigh bursting with knowledge, when he comes in through the door; he sees the work of the mimeograph; he sees the books "McGill University Examinations." The professor speaks

in tones dignified and grim: "Put your books away." It is all over. In a short space of time each man's cranium is at work, and with a writhing countenance he fills two or three books to the, great disgust of the professor. But whom are we to blame for those things? Surely, the man who invented exams. ought to have a millstone hanged around his neck. To think that Spring, a time of gladness and joy, should be such a burden to us, poor creatures of humanity!

In a recent college paper, we noticed a suggestion made to have exams. changed to the Fall, so that this season might be devoted to the enjoyment of nature and its happy surroundings. Perhaps this suggestion is a good one, although lovers of the Fall might object.

SUBSCRIPTIONS.

We gave some hints about these also in the editorial, and perhaps a few detailed remarks would not be out of place here. Our alumni have not been supporting

the Magazine in the past as much as they should. Why is this? We venture to suggest. They do not think at all of the value of the subscription. It's simply a case of "out of sight, out of mind" in many cases. Many others say: "Why, what's the good of one subscription, that doesn't help any?" But, when we remember the large number of Alumni we have—all these, at \$1.00 each, would make quite a substantial addition. Let us hope that neither of these reasons will pervade the minds of students who are leaving the College at the end of this year. Pay in your dollar at once, to make sure you have done it, and then resolve to send in at least one from some other person during the Summer. Address business communications to the Business Manager.

A NEW COVER.

Seeing that this issue completes the end of the second volume, the Editorial Board have deemed it fit to change the design on the cover of the Magazine, beginning with the first number in the Fall. With this idea in view, the Board has decided to offer a prize of \$5.00 for the best original design sent in, not later than September 30th, 1912. Please address all designs to the Editor, Macdonald College Magazine.

ATTENTION, STUDENTS!

We are sorry to find it necessary to draw the attention of the students to the lack of attention which has characterized the audience in so many of the meetings held in the Assembly Hall. As a matter of ordinary courtesy, the audience ought to give its undivided attention to the speaker or performer. If part of the audience cannot appreciate the performance themselves what

right have they, by chattering and laughing, to attract the attention of the more appreciative portion of the audience? Besides, their inattention prevents the performer from properly concentrating his thoughts on his work. This fact was brought forcibly before us when we saw, posted on the bulletin board a notice to the effect that Dr. Perrin would discontinue his organ recitals on account of the chattering of an unappreciative audience. To those of us who appreciated and enjoyed Dr. Perrin's excellent performance, this announcement is a great blow, but we hope it will have the effect of putting an end to this sort of thing. We would advise those who cannot be silent during a performance, to stay away from it, because of the two evils—speaking to vacant seats or speaking to an inattentive, unappreciative audience, the latter is the worse.

OUR GRADUATES.

Last year McGill sent out her first graduates in Agriculture. In a few weeks, she will send out her second class—a class of which we are justly proud, for they have proved themselves fully up to the standard of what a college like ours stands for. Winners on the athletic field, as on the debating platform, the Seniors have shown themselves the possessors, not only of vigorous intellect but also of trained muscle; and is not this as it should be, after four years' training at Macdonald College? In these days of pioneer work in scientific agriculture the fields of service are wide and varied, and knowing our men as we do, we feel assured that they will not be long in finding the sphere in which they can best serve.

Class '12, we wish you God speed.

Always keep in mind the motto of your Alma Mater. Pay heed, rather, to the second half of the motto, and the first will take care of itself, for be sure that, if you "serve" well, to you will belong "MASTERY FOR SERVICE."

OUR EXCHANGES.

ACKNOWLEDGMENTS.—*O. A. C. Review*, *The Maritime Students' Agriculturist*, *Acadia Athenæum*, *King's College Record*, *The University Monthly*, *The Mitre*, *The Illinois Agriculturist*, *The Alumnus*, *Stanstead College Magazine*.

In *The O. A. C. Review* we note the following statement in reference to the recent inter-collegiate debate. "The St. Anne's men had gone to all manner of trouble to get material, even going to Ottawa for several days to decipher governments tatistics. From what could be gathered from some of those who were asked to be judges, the Quebec men expected to win *an easy victory*, but it was *only by the narrowest margin* that they were finally announced to have won."

Was it through an editorial error or through a printer's error that the two italicized phrases were interchanged? It is obvious to those of us who heard the debate that the first clause ought to take the place of the second. Our men certainly "went to all manner of trouble to get material," and we feel more honored to have this said of us than to have it said, "They must have prepared their material on the train," as someone remarked concerning the opposing team. The statement that the judges said we expected an easy victory can surely not be founded on fact. Should we have gone to "all manner of trouble" had we expected an easy

victory? Again, how could the judges have got this idea from our men, when neither of them knew the judges even by sight?

"Farming as a Spiritual Exercise" is an interesting article in *The Acadia Athenæum*. As the title implies, the writer deals with the benefits derived from farming in the development of character, and points out that even reverses may be blessings in disguise. Here are a few of the writer's thoughts.

"What can country life do for manhood? Will the open spaces make it easier to have an open mind? Does a wide sky-line create a roomy and humane spirit? It is true that country life tends to produce men of depth and moral resource."

"There is no calling, except, possibly, the Christian ministry, which makes so diversified a demand upon intelligence and character. "

"The whole farm is a laboratory wherein processes of entrancing interest are the commonplace experience of every hour."

We always turn with pleasure to *The University Monthly*, assured of finding it good interesting reading. In the February issue the articles on "The Single Tax" and "Socialism" deal with two live economic questions which are very clearly put, considering the shortness of the articles.

We have on our desk a pamphlet published by Beatty Brothers, entitled "How to Build a Dairy Barn." It is a well-prepared pamphlet, and contains many suggestions which may be valuable to dairy farmers. The article on ventilation, by Mr. J. H. Grisdale, is of special interest. There are numerous plans and pictures.



CORRESPONDENCE

To the Editor,

MACDONALD COLLEGE MAGAZINE:

Dear Sir,—I would like to add something to the illuminating article on Newfoundland, by Prof. Kneeland, which appeared in the February-March issue of your magazine. Some points raised are capable of a different coloring at the hands of a Newfoundlander. A cursory holiday is not quite sufficient to understand the people and their problems.

A correct estimate of the climatic conditions is given, and the reasons for the same. Prof. Kneeland must remember that he is speaking of the eastern seaboard, and not of the interior or the west coast. There are probably no vegetables but would ripen in the interior, if given a fair chance. Agriculturally, the country has never been fully tested.

We gather the idea also that the country is not being developed. This is hardly correct. Wherever ore is discovered, mines are being worked. It is impossible to secure timber limits, as all are taken up with the result of the establishment of large pulp and paper plants. There are doubtless agricultural opportunities that have not yet shown up. If trees are "twisted and gnarled" it is not of the severity of the climate, but because of the scanti-

ness of the soil on the highlands. In the valleys, pine and spruce of magnificent proportions have grown.

As to whisky, none of it comes from St. Pierre, except perhaps a little for private use on that part of the coast adjacent to the little French island. The drunkenness is practically confined to St. Johns, as the rest of the country is under "Local Option." One cannot judge of the drinking habits of a people by estimating conditions on the chief holiday festival of the year. Most Newfoundlanders would consider it quite an exaggeration to say "that drunken men, staggering along the streets or being carted home like logs of wood in dump carts, were almost constantly in view." It might seem out of place to say that Montreal is a great deal worse in regard to drunkenness than St. John's, there being more arrests and more liquor saloons in proportion to population. I presume the difference is this—in St. John's you can see what there is, as all liquor stores close by law at 6 p. m.

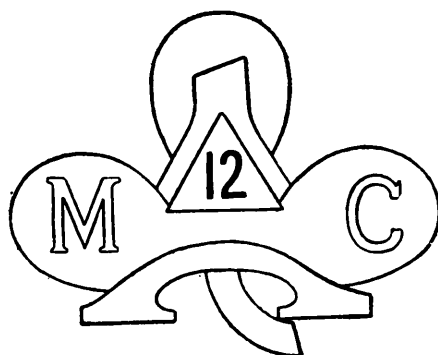
As to trade, though the population increases but little, it has kept on growing at about the same rate as that of Canada, in spite of her immense immigration.

Thanking you for space, I remain

Yours truly,

NEWFOUNDLANDER.

The Seniors.



THE four years that you spend at College pass very quickly, and it seems but a short time since the present Senior year assembled here like the other unassuming Freshman Classes; however, their diffidence soon passed away and they began to slowly build up a reputation as hard workers and clean sports. This reputation they have maintained, by winning the Debating Challenge Cup, and Athletic Shield in this their last year here.

The interest and zeal which the Seniors have put into each of their undertakings have largely contributed to their success and on the last field day when they won all the team events, viz.: Tug-of-War, Hose and Reel and Relay races, it was because each man did his best and all worked together.

They tell us that a College is built up by the graduates it sends out, so while we are sorry to lose the present Seniors we know that they will spread the name

of Macdonald far and wide and bring renown to their Alma Mater, both by their own efforts and by the efforts of the men whom they inspire to follow in their footsteps and seek knowledge in our spacious halls.

The work of the individual members of the class will be spoken of in the biography of each, but it is only right that we should say a word of praise to those who have been Leaders and Presidents in the various student clubs and associations, because enthusiasm has been the keynote of all the Student Organizations this year, and this is due largely to the efficient manner in which they have been handled by their leaders and executive. The firm foundation which the Societies have received this year assures their success in the future. If there is any one thing characteristic of the Senior year it is their staunch loyalty to themselves and to Macdonald.

We wish you success and we are sorry that we will no longer hear in our halls—

Ripper, Rapper, Cannon Cracker,

Sis Boom Ba—

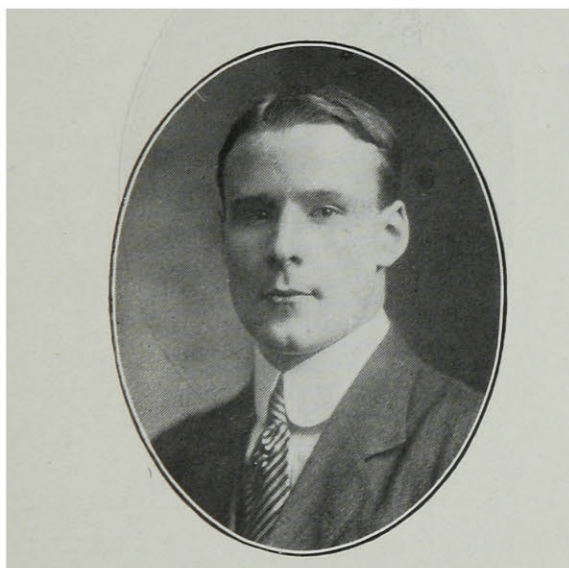
Agriculture 1912,

Rah! Rah! Rah!

Personal Accounts of the Seniors.

RODERICK STUART KENNEDY.—A Canadian by birth and an Englishman by education, "Rod" Kennedy in December, 1907, finally decided to make Canada his home. Arrived here, a year on a farm at Vankleek Hill, Ontario, prepared him for his course in Agriculture at Macdonald.

His wonderful versatility of talent soon brought Kennedy to a position of



prominence in practically every phase of college life. In his first year, besides being president of the Macdonald Literary Society, and year representative on the Trifolium Board, he distinguished himself on Sports Day, and occupied a position upon all the athletic teams of the class, and upon the executive of the Athletic Association. The pace which he set in his first year he has fully maintained. The editorship of the Magazine in his Junior year, the winning of the Public Speaking contest in his Senior year, the recent debate with the O. A. C., and the fact that he is as yet the only Macdonald man who has earned the Senior McGill

"M" may be mentioned as culminating triumphs in his college career.

We congratulate the Animal Husbandry Option upon this member.

D. BRUCE FLEWELLING.—D. Bruce Flewelling, like so many of the members of Class '12, calls New Brunswick his home. Most of his life has been spent upon a farm, and his early schooling was obtained at the expense of a two and a half mile walk to and fro every day. Doubtless it was here that he developed the lusty lungs which have enabled him to fill so well the position of leading bass in the College Choir, and in all our quartettes and choruses during the four years that he has been with us.

His long farm experience, and three years at a Macdonald Consolidated



School laid the foundation for a very successful college course, and he is now a prominent figure among our budding horticulturists.

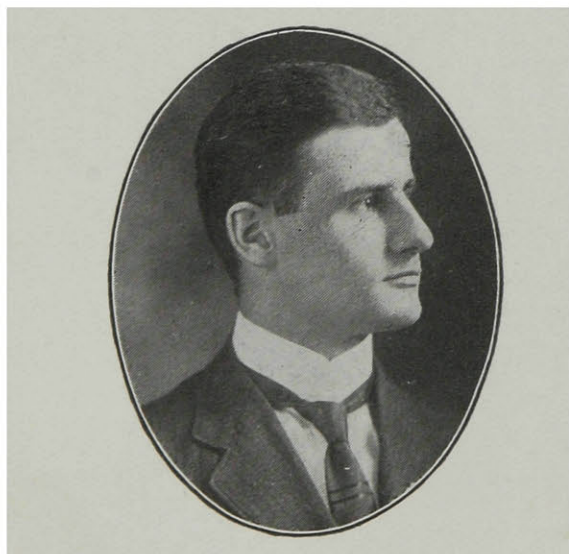
A good, all-round man, Bruce has occupied positions on the committee of the

Class '12 Literary Society and upon the class baseball team throughout his entire course. We feel sure that the strong sense of humour and merry soul which make him the life of any company will always stand him in good stead.

WILLIAM C. DREHER.—Born in Radebeul, Germany, William C. Dreher moved with his parents to Lausanne, Switzerland, when at the age of five years. His early training, however, was received mostly in German schools.

A natural bent towards agriculture led him first to enter an agricultural school in North Switzerland, and, in 1907, to seek the larger opportunities of Canada. Here, after a year of practical farm work, he joined the ranks of Class '12.

Besides proving himself a first-class student, "Bill" has been prominent in

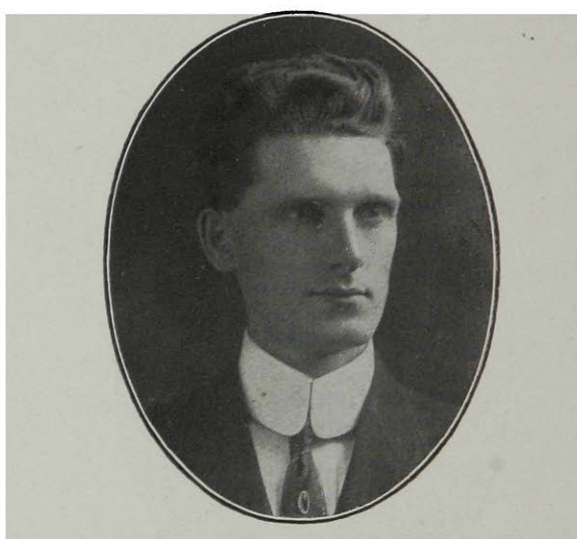


both literary work and athletics. He speaks four languages fluently, and has already assisted with considerable extension work of the Horticultural Department among the French-speaking people of the province.

The tallest and most dignified member of Class '12, Dreher impresses us with a personality not less dignified or upright than its owner's carriage. Concerning his future we entertain no doubts.

KENNETH M. FISKE.—A graduate of the Provincial Normal School in his native town of Fredericton, before coming to Macdonald, Kenneth M. Fiske had successfully wielded the rod for one year in a school in Chipman, N.B. From his earliest days, however, he had been interested in agriculture, and he welcomed the opportunities opened by the advent of Macdonald College for special training in this profession.

Fiske quickly rose to a prominent position in his class. In his Freshman year



he was president of Class '12 Literary Society, and continued on the executive for two succeeding years. The Y.M.C.A. flourished under his presidency during his Junior year. As Poultry Editor of the College Magazine during 1911 he displayed further aptitudes.

Always moderate and conservative in his counsel, his voice has been heard and appreciated at many a committee meeting, as has been also his gay and optimistic temperament at the dining-table and elsewhere. Cereal Husbandry is his specialty.

EMILE A. LODS.—To Montreal belongs the honour of being the birthplace of Emile A. Lods, but many places have shared the honour of his habitation.

New Brunswick, Quebec, Ontario, Massachusetts, Delaware, and Wisconsin, have all in turn made their contribution to the sum total of his training and education.

A popularity which began in his first year has remained with Lods to the end of his fourth year. That this popularity is well deserved, has been amply proven by the efficiency with which he has filled the many positions of trust which came his way. The class has flourished under his presidency; the Assembly Hall has known his pleasing speech, both in inter-class debates and as president of the Macdonald Literary Society; the pages of the College Magazine have been frequented by his writings; the affairs of the Men's Residence, under his chairmanship of the Residence Committee in his Senior year, were so admirably con-



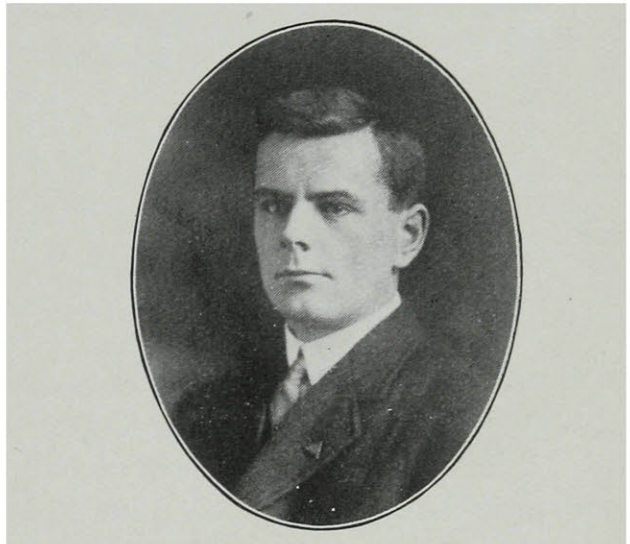
ducted that he was unanimously elected to a second term of office.

His ability as an agriculturist, especially as a cerealist, together with his ability to speak both English and French with equal fluency, is bound to make him a power for progress in French Canada.

L. CARLETON RAYMOND.—Of the many worthy sons which the Maritime Provinces contributed to the ranks of

Class '12 none is more worthy than L. C. Raymond. "Carl" was born and brought up on his father's farm at Bloomfield Station, New Brunswick. After preliminary training at his home school, and at St. John High School, he decided to fit himself for agriculture as a profession by taking the course at Macdonald College.

The many varied activities with which he has been connected since coming here



have shown him to be possessed of great ability and diversity of talent. The Magazine, Macdonald Literary Society, Y. M. C. A., and Class committees, all owe much to his membership. The year 1911-1912 found him president of the Y. M. C. A., secretary of the Students' Council, a member of the Class baseball team, and the captain of the team winning the trophy for the hose-and-reel race.

We predict for him in his chosen specialty, Cereal Husbandry, the same large measure of success which has characterized his college course.

MALCOLM B. DAVIS.—Davis was unfortunately born at Yarmouth, N.S., and so spent his first two years (agriculturally speaking) at the Truro Agricultural College. It was not till he had exhausted possibilities there by finishing head of

his class that he turned up at Macdonald. He made a most successful editor of the College Magazine during the last part of 1911, and in his last year has been president of the Horticultural Society, secretary of his class and president of the Class Literary Society. He has done



much for the College Literary Society, not only as a member of its committee, but by leading the successful debate against the O. A. C., where his illimitable capacity for facts and figures, joined to a bewildering verbosity, crushed his opponents and frightened the judges.

Go on talking, Malcolm, and keep your chin tilted. You'll get on.

JULES SIMARD.—Jules, as a non-smoker and a teetotaler, forms a unique study

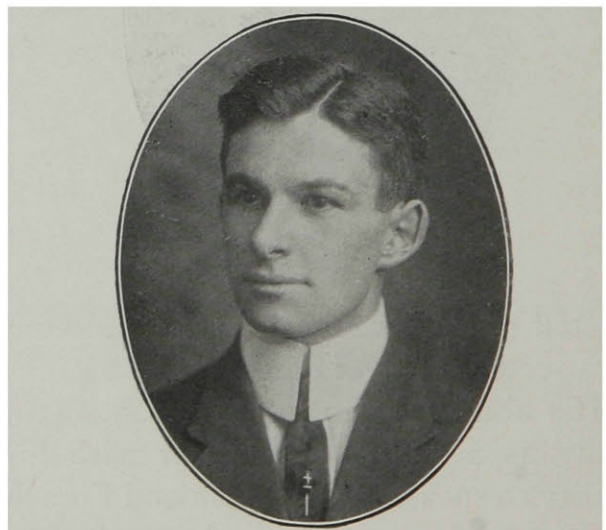


for his classmates who have tried in vain to overcome these uncomfortable pro-

pensities. In fact, whatever Jules does, he cannot be turned from it. His energies have been devoted chiefly—must I say it?—to work while he has been with us, but by organizing and becoming the first president of "Le Cercle Francaise," he has done a great service to college life. In his fourth year he showed himself a true countryman of Mirabeau by winning the \$4.00 prize in the Public Speaking Contest. During his vacations Jules has done much work among his countrymen in the province. For two years he has been working on the Conservation Commission. Last year he judged in the Government Field Crop Competition in eight counties and at the Seed Fair at Quebec.

In spite of the two disadvantages mentioned at first, Jules is very popular with his classmates. "Mastery for service" is your motto, Jules. Keep it up.

A. A. CAMPBELL.—Archie has other claims to public notice than his pompadour and truculant gait. If he had not been born at Howick (or elsewhere) some



years ago, College Athletics would not have been what they are. For four years he has been a member of the M. C. A. A. Committee, in his third year as vice-president, and his fourth as president. During his term of office the con-

tests with the O. A. C. were inaugurated and the Association flourished as never before. The College Basketball and Baseball Teams have owed much to him for four years, the latter of which he captained for two. During his fourth year, he also managed the most successful hockey team we have ever had.

Trans-campian dwellers sigh in vain after Archie's pompadour, as Archie didn't once say in a fit of poetical inspiration:—

"Give me cows and heavy horses;
None of your Teachers and Science
Short Courses."

He is as proficient an Animal Husbandry expert as he is an athlete. In his fourth year he was a member of the famous judging team which brought back the trophy from Chicago and was fifth out of all the contestants in the competition which was open to all the United States and Canada. As president of the Animal Husbandry Club he has done much to put it in its present successful condition. When we meet in after life, I hope I am on the same side as you are, Archie—it's safer!

A. R. NESS.—Howick seems to be noted for Ayrshires and athletes, and we

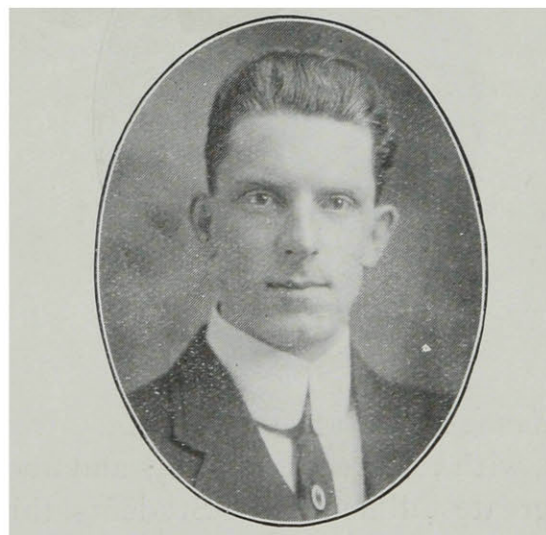


have got good specimens of each at the College. Alex. Ness, of course, is one of

the latter. For his first three years he was a member of the M. C. A. A. Committee, part of the time as treasurer. For four years he has been on the hockey team and for two years as captain. For four years the baseball team has owed him much. He was a member of the basketball team during his second and third years, and in his third and fourth years he played on the College Association Football XI. Like many other athletes, Alex. is in the Animal Husbandry option, and besides being for a year secretary-treasurer of the Animal Husbandry Society, he was a member of the winning team at the International Stock Judging Competition. Like himself, this account of Alex. is short, but it contains a lot.

You've turned out true to type, Alex., so you are not a "mutation," but you are a "sport," alright.

STUART MACLEOD FISKE.—Stuart is one of those rare people who often work and always smile. Would that we had



more of them. Born in Fredericton, N.B., and educated at Florenceville, he makes us wish to recommend those places to all who are liable to fits of the "grouch." They will certainly be a cure. Though a son of the manse, he soon began to take more interest in soils than

souls, and after managing the Fiske farm at Florenceville he came to Macdonald in 1908. He is one of the most enthusiastic members of the Animal Husbandry Option, which fact was appreciated when he was made secretary of the Animal Husbandry Club. Stuart has always been an ardent basketball player and is a member of the class team. We shall always remember you, Stuart, by your enthusiasm and eternal good nature. Good luck.

W. W. BAIRD.—“Bunt pulls the strings” would make an excellent title for Whylie Baird’s history. The last of the “Old Guard,” he has done as much—for his size—as any man in college. His great claim to immortality is based on the rink—which now seems almost based on Whylie. He has run the College Rink for the last three years, twice



as manager and once as secretary-treasurer, with the greatest success and under the greatest difficulties. Students, think of what the Rink has meant to you during your stay at Macdonald College, and give credit where it is due—to Whylie. It is not only the Rink “strings” that Bunt has pulled. For three years, he has been on the Athletic Association Committee; the baseball team has

known him since its inception, and for the first two of those years, his wicked twirl was the undoing of confident batsmen. The College Hockey Team knew him for three years, and since we have had an Association Football XI his twinkling legs have delighted all onlookers and bewildered his opponents. But, reader, do not think that Whylie is all legs. He has brains as well. For the last two years he has been Alumni editor on the College Magazine; in his second year he was treasurer of the College Literary Society; for three years he has been usher in the Union Church; and for five years he has been the mainstay of the Masquerade Refreshment Committee—and has done his duty well—as many super-replete gastronomic artists have testified as they have staggered home from supper. Well done, Whylie. You have done much and said little. The College owes you much.

J. R. N. MACFARLANE.—A short business career and a partial course at McGill made “Mac” such an impressive figure that he was elected as first president of Class ’12, a position he held to everyone’s



satisfaction, except his own—for Mac is modest—very modest. Even the discovery of half a dozen dead sparrows in his

bed elicited that disgusted "Ough" which is the joy of his classmates and which makes him the recipient of all the gruesome details discovered by his friends. During 1909 "Mac" was secretary of the Students' Summer Association, and during his third year he was Class treasurer, emerging from that office without a stain on his character or a cent in his pocket. "Mac" holds a commission as lieutenant in the 11th Infantry Regiment of the Canadian Militia. He confines his blood-thirsty tendencies to the vacation, however, and during the term—I hate to say it—he works.

Go ahead, "Mac," Canadian landscape architecture needs men like you.

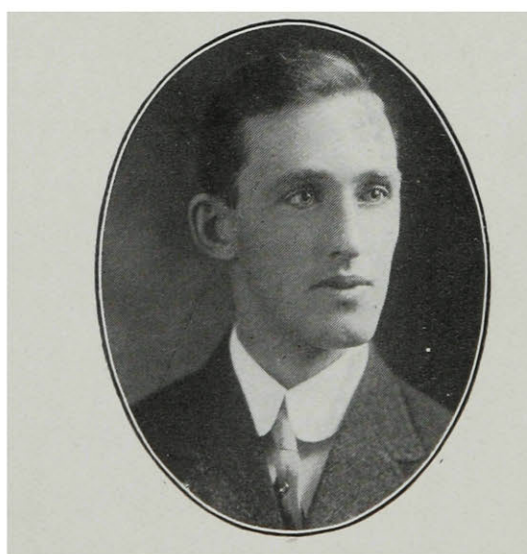
ROBERT NEWTON.—Robert Newton, who was born in Montreal in 1889, is without doubt the "first" student of the College. "Bob" has a very enviable reputation and will leave behind him a standard worthy of emulation. In 1894 he left Montreal for the country, there attending the district school for four



years; after this he attended the Montreal High School for five years. At the end of this time having a taste for farming, Bob began work on his father's farm at Plaisance, Que., where he remained till 1908, when he joined Class '12. From

the first he has led his class in examinations, never having suffered defeat throughout the course. When the Magazine started, he filled the position of Agricultural Editor and later was elected Advertising Manager. The Magazine owes much of its success to Bob's untiring energy, and his name will always be connected with it as one of the "pioneers." The greatest honour a class can give has been bestowed upon him twice; in his second year he was elected president of the class, an office which he again fills in his Senior year. In virtue of his position as president of the Senior Class he is president of the Students' Council, placing him at the head of all student affairs. As a debater his skill on the platform has been often demonstrated, as he has been a participant in three victorious inter-class debates. Bob specializes in Cereal Husbandry. We all wish him well and feel assured of his attaining a position of eminence in his native land.

JAMES M. ROBINSON.—James M. Robinson was born at Berwick, N.S., 1886, in the far-famed Annapolis Valley. "Rob" spent most of his early years in pursuit of



knowledge at the Berwick public schools, his vacations being spent on his father's farm. In 1908 he entered the Nova

Scotia Agricultural College and immediately came into prominence as a budding horticulturist. When the final results for the year were issued "Rob" came second with first-class honors. While at Truro he did good work on the hockey team. In the fall of 1909 he was seized with Macdonald fever and decided to finish his course at this institution where he has gained the favor of the students as one of our most capable young men, being a good ladies' man, a fine soloist, and an excellent athlete. In the last-named line he has gained distinction as a pole-vaulter, winning first place here and third at McGill. He was also a member of the Hose and Reel Team which captured the Vaughan Trophy; he has also played on the Class Baseball team. We all wish Rob a happy life, and knowing his capabilities and personality do not hesitate in predicting a bright future for him. He specializes in Horticulture.

JOHN G. ROBERTSON.—John G. Robertson, known to all as "Doc," was born at Churchville, N.S. He was raised on



oatmeal cakes and porridge in that Scotch community and gives good evidence of being in excellent health. At the early age of sixteen he graduated from the New Glasgow High School. In

1908 he entered Macdonald where he has gained for himself an enviable reputation as being of genial, vivacious and affable character. He has won for his Alma Mater exceeding great laurels, being on the team that won the trophy at the Chicago International Stock-Judging Competition and coming third in the list of individual records at the same event. Doc in his third year ably managed the Class Literary Society, and in his fourth year has very effectively filled the position of president of the Macdonald College Literary Society. The Magazine has had the benefit of his humour, for "Doc" has for four issues been the "funny man" of that periodical. Among other important offices he has filled that of vice-president of his class, year representative on the Athletic Association, member of the Students' Council, member of the winning Relay team and Hose-and-Reel team for 1911. Besides having thus won honors in literary work, athletics, and stock-judging, "Doc" has kept a good position in his class standing and is one of our coming live-stock men of the Dominion.

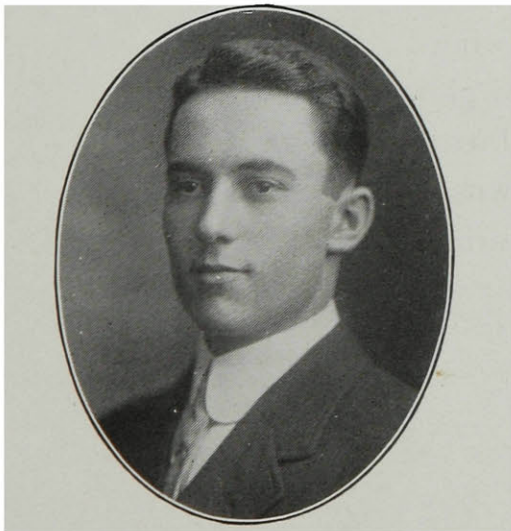
FRED. S. BROWNE.—Fred. S. Browne, a fish-eater from Nova Scotia, in 1889



was born in Tusket, of Indian fame, and Fred still bears signs of savagery. After

a few years' residence at his birth place, his father, a minister, moved to Mahone Bay; here Fred attended the Mahone Bay Academy. Since coming to Macdonald in 1908 he has made many friends and is looked upon as a good-hearted fellow by his classmates. Athletics is Freddy's field for achievement. Here he has gained many distinctions. In his second year he won the Madame Cornu medal for second place on Sports' Day. He has been the strong pitcher for Class '12's baseball team, and in the last year for the college team. The 1911 champion Tug-of-War team was assisted by his presence, and he was one of the Class Hose-and-Reel team which won the Vaughan Trophy in 1911. Fred, as a specialist in Horticulture, gave a good account of himself in 1910, when he successfully managed the large orchard of Mr. Maxwell, at Baie d'Urfe. His classmates and all wish him much success, and expect to hear of him in the near future as a prominent pomologist of Canada.

LEANDRE V. PARENT.—Leandre V. Parent, "Canayen," dark-eyed and



fierce-looking but really quite congenial, is known to the ladies and to the boys as "Trix." Trix can boast of being the youngest of his class. He was born at Grande Ligne, P.Q., in 1892, at that

place he received his primary education and later attended the Feller Institute. In 1908 he joined Class '12 at Macdonald, having a matriculation standing. Besides being extremely popular across the campus, Trix has gained the goodwill of the Faculty and his fellow-students. He has occupied several positions of importance in the students' organizations. In the summer of 1909 he spent much time gathering hordes of *Doryphora decemlineata* for the Horticultural department, an occupation at which he gained much distinction. The winning hose-and-reel team of 1911 and the winning relay team of the same season owe much of their success to Trix's ability as a sprinter; the class track team also was helped by our fast Frenchman. He has done efficient work as secretary-treasurer of the Macdonald Horticultural Club, secretary of Class '12 Literary Society, secretary of the Entertainments Committee of the Masquerade. Being a fluent speaker in both French and English, no doubt is expressed as to his being of value to the horticultural interests of this province.

H. B. DUROST.—Was born at Glassville, Carlton Co., N.B., many years ago—exact date unknown. His *pupil* stage



was spent in the superior school of Florenceville, N.B., and later he pursued his

studies at the Macdonald Consolidated School in Kingston. During 1906-1907 he attended the Provincial Normal School at Fredericton, where he was induced to take up school teaching for a year. At the end of this time, he decided to pursue the study of Agriculture at Macdonald. Durost has had a wide experience in both practical and commercial agriculture, as he was for several years connected with several produce and commission firms of importance. Besides being a good student, he has occupied several executive positions in the student body

and has held his own in sports. During 1909-1910 he was secretary of Class '12 Literary Society and captain of the College basket-ball team. In 1911 he was an efficient member of the executive of the Macdonald Horticultural Club, and at present is very ably filling the position of president of the Macdonald Apiary Club. All those who know Durost do not doubt that he will in the near future give a good account of himself and reflect honor on his Alma Mater.

He is a specialist in horticulture and has the best wishes of us all.

The Maple's Dream.

The impending night a vision breaks,
She dies to dream of Spring.
In her chill heart, a sweet stir makes
The buds' awakening.
A far-off buried whisper wakes—
The birds are on the wing !
So, where the maple's red glows bright
In stress of Winter's breath,
Life takes the torch of dawn, to light
The sunset fires of death.

J. A. D.

A Vacation on a Farm.



DURING the Spring of 1898 I, a greenhorn from the city, obtained a job as "hired man" on a farm, so early in April I took up my new work.

Some snow was still on the ground and the cattle were kept indoors, except for a few hours each day, when they were turned out into the yard. There were about 20 or 25 head in all, so "the Boss" and I had quite a lot of "chores" to do, and it was part of my work to pump water for the cattle while they were out. Cattle are not so stupid as they look, but apparently have some highly developed means of communication among themselves. I am sure that they took me as a joke, and passed the word about that I was a "new hand," for as soon as I started to fill the trough each cow would come up and drink, drink, and continue drinking (in fact drink much more than any self respecting beast should drink) with a sort of merry twinkle in her eye as if she were laughing at me, until, consequently, I had pumped enough to fill the trough several times. It was some consolation to think of the fine exercise I was getting, but even that on a warm day was poor compensation for the cows' joke. The only way to get

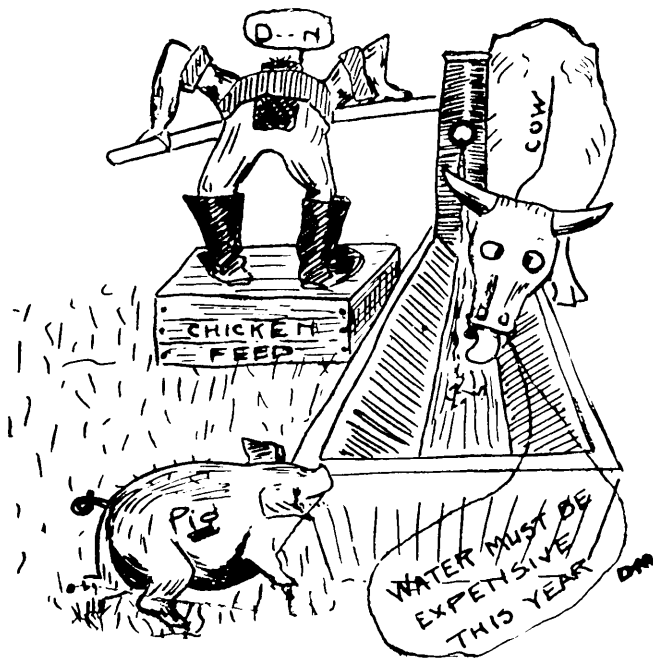
even was to drive them all away, fill the trough, and then leave them in their glory.

Milking was not a strong point of mine, especially when the cows kept switching me across the face with their tails, or kept me playing tag with them all over the yard. After a little practice, however, I could hit the inside of the pail every time. In fact, after a week or so I was milking four or five cows, morning and evening, without much trouble.

It was well into May before we got to work on the land as the Spring was a wet one. We managed, however, to keep busy before that by doing chores, fanning oats, chopping wood, fencing, etc. During this time I received my initiation into the often unnecessarily long working day that many farmers put in.

For example, one evening about 7.30 p.m., when I thought we had finished work for the day, "the Boss" suggested that we put the cariole away in the shed loft as it would not be needed again until next winter, so with the help of a block and tackle we did, but no sooner was this done than he proposed putting away the working sleighs also. But fortunately they were too large to handle without using a team, so we left them until next day as it was too late to

L'EAU POUR LES VACHES



take the horses out without a good cause. This was merely one instance where we worked late when there was no particular reason for doing so. In the evening when it was too dark to work outside "the Boss" would fill in his time doing odd jobs about the house, instead of resting like a Christian, and this seemed to be the common practice around that neighborhood. People did not take time to live, but worked incessantly. The whole round of life was work, eat and sleep, with lots of church on Sunday, and a church social thrown in two or three times during the Summer. The general routine of week days was : rise about 4.30 a.m.; start work about 5 a.m.; breakfast at 6 o'clock; work until 11 a.m.; dinner; start work again about noon; supper at 4 p.m.; work until dark outdoors then another light supper, then chores and odd jobs; to bed about 9.30 p.m. On Sundays we only did the chores (milking, feeding and cleaning), but if I went out visiting I was excused from most of this Sunday work, so could not complain. Also on Sundays I managed to get an apology for a bath, by using a large tub, so always looked forward to the first day of the week.

During May we got "onto the land" as the ground had dried out sufficiently. Then I was instructed in the fascinating art of plowing, harrowing, etc. When first I drove a team with a drag harrow I took too short a turn once in coming about, and nearly upset the whole outfit on top of the horses. "The Boss" had told me previously not to take too big a

turn as I would leave spaces uncultivated so I was trying to follow his instructions. He was driving a team in a seeder nearby and almost had a fit when he saw the mix up. He was in such a state I almost feared for his health (or mine). However, after that experience things went more peaceably.

Plowing was one of my favorite occupations, and watching the sod turn always made me think of waves parting at the bow of a boat.

I also spent several very pleasant days driving a roller as I used to almost go to sleep. Occasionally I would "Gee" or "Haw" at the horses, but used to get mixed up as to which was "Right" and which was "Left," but as I used the reins also, the horses seemed to understand what was wanted.

Haying and harvesting came in due season. The former during the heat of July and the latter in August. Both these occupations meant hard work, but were clean and enjoyable. In haying we used a hay-loader and a horse-fork so were saved a lot of pitching. During harvesting the Boss ran the binder while I did the stooking.

I put in two days with a road gang repairing roads, and was employed in the gravel pit loading carts. It was heavy work, but we had lots of fun.

Then I worked with a sawing gang for several days, going from place to place about the neighborhood.

Chickens are useful things, but the great majority lack strength of personality. You see them going about in a



sort of lackadaisical manner with their mouths wide open. Yes, the majority of them lack personality, but there are exceptions. There was one little cockerel on the farm where I worked which I noticed especially. He reminded me of one of those little street urchins so common in large cities, who are always getting kicked about, but who bob up serenely. Well, this little chap had lots of cheek. He was undersized, poor looking, and had only one or two feathers, as most of those that had started growth had been pulled out by the old hens. His head was completely bald, however, that was nothing against him, as it is said that a bald head represents intellectuality. I took quite a pride in keeping the stable clean, but this little chap

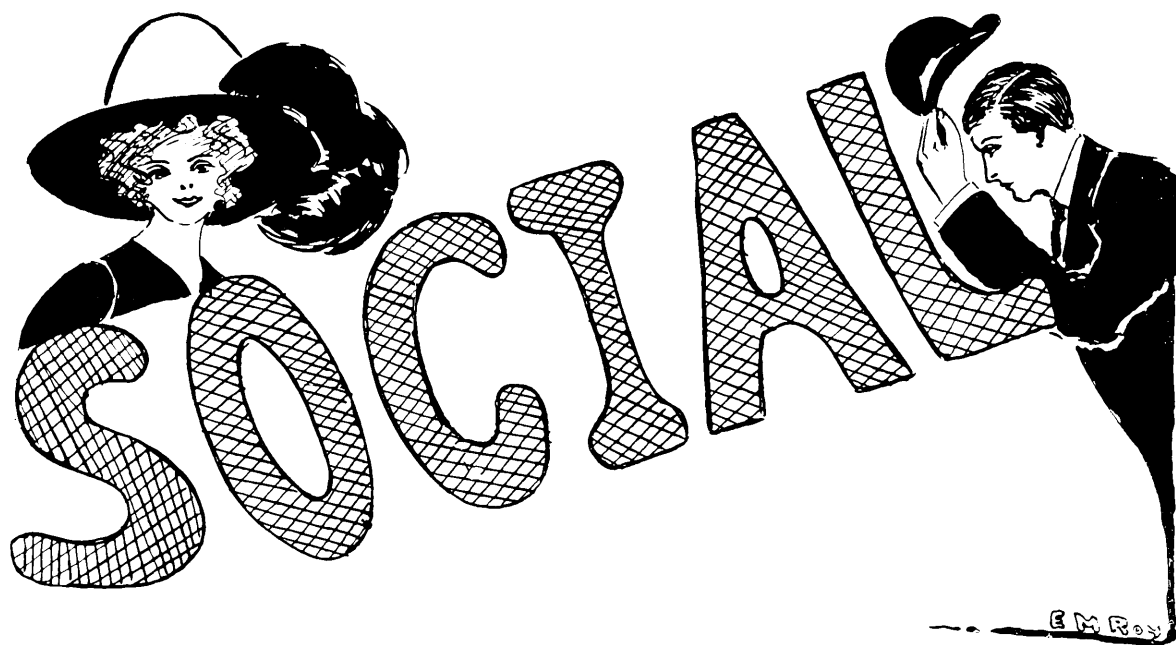
seemed to think the floor looked better carpeted, so would get in whenever he got the chance and would spread the bedding in the stalls as much as possible. Of course I would drive him out with whatever was in my hand, but that did not worry him and he would bob up again as soon as my back was turned. If he had been born a "human" he would have made a good insurance or book agent.

After harvesting my farming experiences came to an end as I retired on my salary which I received in a lump sum of \$40.00. Although my pay seemed small for four months work, still the experience gained made a different man of me, so I was well repaid for my season spent on the farm.

J. R. M.



A SNOWSHOE TRAMP.



THE SCIENCE RECEPTION.

The Science girls delightfully entertained the Guelph students who were the guests of the Macdonald Aggies, at an excellent reception held in their gymnasium on the night of the 10th February. The first part of the programme was held at eight o'clock, in the Assembly Hall, a tableau being the order prescribed.

We all knew the Science were liberally blest with nature's ornament, and they made quite an impression in their fairy-like robes upon our rivals from the O. A. C. In the gymnasium we partook of dainty refreshments and were all glad to hear of the novel programme which was taken full advantage of and thoroughly enjoyed.

The standard of this time-honoured event, both in arrangement and entertainment, was well maintained, and we all heartily appreciate the kind and friendly way the "Science" received our agricultural fraternity from Guelph.

We are great believers in local reciprocity, and look to the masquerade for its repetition.

THE KING'S DAUGHTERS.

If the Kingdom of Heaven is really to be taken by force the King's Daughters should feel confident. They mobilized once more on March 17th and took possession of the Clarendon Hotel which successively became a Rummage Sale counter, a Market, a Tea Room and a Concert Hall. The Rummage Sale was most interesting and was largely patronized by the village people. The market, which rivalled Daoust's in its extent, had its counters loaded with every imaginable article from canned herrings to carnations, and behind them were the amateur saleswomen themselves, dressed uniformly in attractive white frocks, the primness of which was somewhat belied by the equally attractive but less prim faces above them. The effect of the frocks and faces combined was somewhat bewildering to the mere male, who, coming in to buy carnations would probably emerge after passing through a battery of smiles, carrying a few cans of herrings and wondering why he did not feel angry about it.

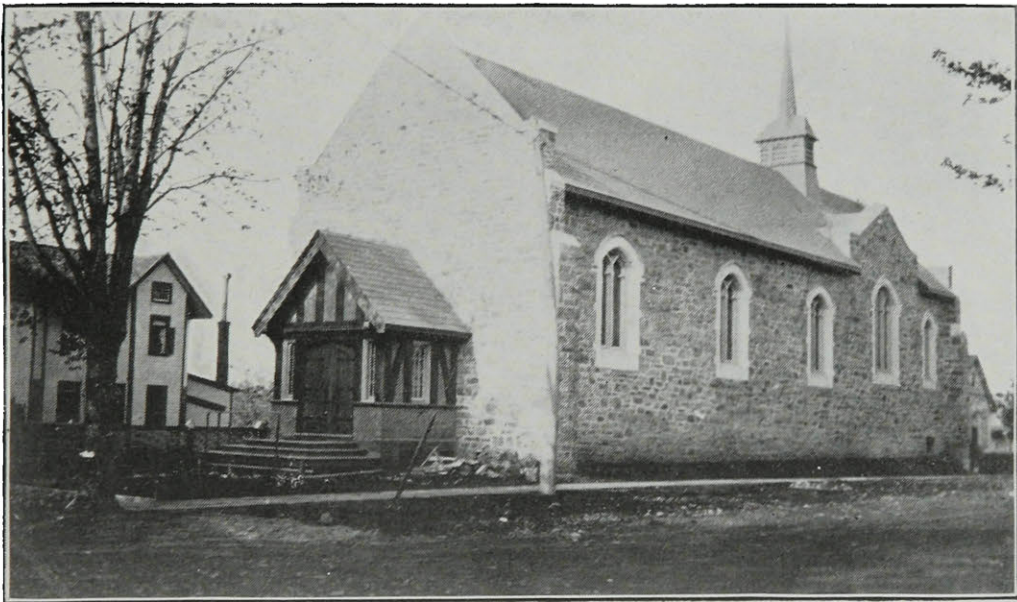
The evening concert attracted quite a crowd who expressed their satisfaction by frequent applause and who were especially delighted by two of Drummond's French Canadian poems which were recited really perfectly by Mr. Godwin, and the magnificent rendering of Dvorak's "Humoresque" by Miss Jamieson, a violinist of whom the McGill Conservatorium should be proud.

The King's Daughters are to be congratulated on another good day's work for a good cause.

R. S. K.

interest now taken in church matters, the numerous services with their large attendance, and the many-sided church activities, are all a splendid tribute to the work the Rev. C. F. Lancaster has done since he came among us three years ago.

The Parish of Ste. Anne's is an exceptional one. It is only on a stalwart minority that the incumbent can rely for continuous support. The College students, who are continually changing year by year, and the summer residents form a large proportion of the congregation. It is the point of view of the form-



ST. GEORGE'S CHURCH.

ST. GEORGE'S CHURCH.

On February 5th the first anniversary of St. George's Church was celebrated. Only those who remember the old state of affairs, can appreciate the true significance of this fact. We have not only to celebrate the replacing of that old wooden structure which once did duty as the Parish church, by the convenient and artistic stone church which we now enjoy, but we must chiefly remember that this church represents a complete regeneration of the former somewhat stagnant state of affairs in the Parish. The keen

er that the writer sees most clearly. The ever-changing throng of students who pass under the spiritual influence of the Church doubtless form a difficult class to deal with, but, on the other hand, a beneficial influence given to so many young men and women who scatter over the Province and the country will mean far more than can ever be attained where that influence is limited year after year to the inhabitants of the Parish itself.

College days are ones of character formation, and they are not the easiest

in which to uphold the highest ideals. The sudden change from home influences to the comparative freedom of college life does not always produce the best results.

St. George's Church, as it stands to-day, is a monument to that work done by Mr. Lancaster, which has done so much to comfort and help many students of Macdonald College.

OBSERVER.

A MODEL PLAY.

The renowned "Ladies of Cranford," who are known in private life as members of the Literary Society of Class A of the School for Teachers, appeared in the Assembly Hall on March 8th in a play arranged from Mrs. Gaskell's charming novel "Cranford." This play was a great success from all stand-points—from the standpoint of the Actresses who delighted the audience by their clever handling of the various parts ; from the standpoint of the Audience, which was lost in the mazes of Cranford etiquette ; and from the standpoint of the "Rooters" in the gallery, who, from their lofty position were able to see many noteworthy happenings which they reported in a euphonious "root."

Dainty "Miss Mattie"—around whom the play centered—acted a charming part in a charming manner. The entrance of the "Hon. Mrs. Jamieson" was greeted with applause and laughter though nothing was farther from that austere lady's intention than to make herself an object of mirth. Prim little "Miss Barker" offset her ignorance of Agriculture by her skill in domestic science, when her beloved Alderney cow fell into the lime-pit, and she dressed the poor animal in a suit of flannel until

time should restore the coating provided her by nature.

"Miss Jessie" and "Miss Mary" were dainty damsels deeply concerned in Miss Jessie's love affair ; but neither they nor anyone else, not even deaf Mrs. Forrester, escaped the critical tongue of Miss Pole, who moved in an atmosphere of virtue. The brisk little maids were irresistible, with their innumerable curtsies. Kind Mrs. Purkis and the little girls, Jane and Susan, who came to buy of Miss Mattie's wares, were very pleasing.

After the last scene the stately dames curtsied their way off the stage to the strains of "Auld Lang Syne."

Off the stage the Ladies of Cranford became again Class A Literary Society and, as such, were entertained by Miss Sinclair, their honorary president.

The student body of Macdonald College greatly appreciated the glimpse into Cranford, sleepy Cranford, where haste was a crime, and men so rare as to be a curiosity. There is one mystery which the play does not clear away. With such charming inhabitants, why were there no men in Cranford ?

The cast of characters was as follows :

- | | |
|-------------------------|--------------------|
| Miss Matilda Jenkins.. | Miss A. Rexford |
| Miss Mary Smith..... | Miss M. Travers |
| Miss Jessie Brown.... | Miss L. Woodley |
| Miss Pole..... | Miss E. Read |
| Mrs. Forrester..... | Miss M. Scott |
| Miss Betty Barker..... | Miss M. Shaw |
| The Hon. Mrs. Jamieson. | Miss V. Scott |
| Martha..... | Miss A. Farnsworth |
| Peggy.. | Miss M. Upton |
| Mrs. Purkis.. | Miss E. Griffith |
| Little Susan.... | Miss M. Locke |
| Little Jane. | Miss F. Egg |

M. D.

THE MASQUERADE DANCE.

The crowning social event of the year at Macdonald College, the Masquerade Dance, took place on Feb. 16th and quite fulfilled the highest expectations of all present; for the fame of the Macdonald masquerade had been noised abroad and every one expected a

scene a sylvan appearance that was very pleasing.

The evening opened with the Grand March, and it was an interesting procession that moved through the halls, composed as it was of such widely varied characters, Quaker and clown; policeman and criminal; court lady and dairy-



FLASHLIGHT OF THE MASQUERADE.

rare good time, nor were they disappointed.

The decorations of gymnasium and sitting-out rooms were all that could be desired, and the number of trees that seemed to have been transplanted to the corridors for the occasion lent to the

maid; all mingled in a millennial state of good fellowship.

A short time was given for getting programmes filled, after which the dancing began. The music was inspiring and the floor was soon crowded with dancers. With the rising of the moon the music

became restful and dreamy, and it took not so very great a stretch of imagination to see fairies on the green sward, only just as the illusion would seem real, a cowboy, or some other person essentially of the earth earthy, would appear; on would come the lights, and the waltz would change to a rollicking two-step.

Then came a pause in the dancing. "Forthwith from dance to sweet repast they turn." The "sweet repast" was greatly enjoyed, and was soon over. Then, "On with the dance!"

And so it went on until the morning hours, when the Cedar of Lebanon (for one was present) had shed its branches, and the petals of the rose had begun to droop, and there was nothing left on the programme but "Home Sweet Home."

The manner in which this old refrain was encored, demonstrated the enthusiasm and appreciation which has always marked this historic college event, and always will mark it provided we can obtain such an efficient and painstaking committee of management as we were so fortunate to have this year. The bulwark of perpetual motion consisted of the following gentlemen:—

Entertainments Committee: L. C. Raymond, E. A. Lods, L. V. Parent, F. N. Savoie, W. Westbrooke. Refreshments Committee: W. W. Baird, J. MacFarlane, A. Campbell, A. Raymond, W. Ricker. Decoration Committee: R. F. Williams, F. S. Browne, A. C. Gorham, H. Fiske, P. R. Cowan W. Hand. General Committee: R. Newton, L. C. Raymond, W. W. Baird, R. F. Williams, D. B. Flewelling.

M.D.

ELEMENTARY TEACHERS' '13 RECEPTION.

The young and ardent teachers sprung a pleasant surprise on us on the evening of the 9th March.

The programme opened with a promenade which was taken full advantage of. The event of the evening—an indoor track meet—was then proceeded with. It consisted of: 1. A 30-inch Dash—several competitors having the misfortune to dislocate their jaws. 2. A Shot Put in which even the brawny aggies failed to get beyond 6 feet. 3. The Hammer Throw (the usual trouble), leaving it go at the wrong time to the great discomfiture of the spectators. 4. Standing Broad Grin, which did credit to the smile that can't come off. The Relay race had a peculiar effect in that instead of producing an unquenchable thirst it brought about what was evidently an insatiable hunger. The girls had anticipated the fact, however, and had provided refreshments of quality and quantity to successfully cope with the growing demand.

The Elementaries are to be congratulated for this thoroughly appreciated entertainment. They know the elements which constitute success.

WINTER SCIENCE SHORT COURSE RECEPTION.

It was quite a new sensation which the above mentioned respectable body created, namely an afternoon tea reception. We never knew what a good thing it was until the afternoon of the 24th Feby. arrived. The "gym," so tastefully decorated, too, and plants hung on the walls which lent to the place a natural beauty and comfort. This was further augmented by the Short Course Crew who made us all feel at home

They treated us to music which hath charms—yet not to be compared to the evergreen (fresh) winter Science Short course. Afternoon receptions are delightful things.

THE ORCHESTRA.

The last rehearsal will soon be o'er
And then Macdonald will know us
ne'er more.

That is precisely the trouble with which we have to contend. After Christmas we well nigh passed out of existence, owing to the fact that some of our "mainstays" were in the departed Short Course. By dint of great exertion, however, on the part of our

ticularly the Freshmen in Agriculture, will bring with them a considerable portion of budding Campaninis and Paderewskis. Then, by making an earlier start than we did this year, we may reasonably expect to excel our attempts of 1912.

H.F.W.

CSASS 15' DOINGS.

The Freshmen Literary Society still continue to hold interesting weekly meetings.



THE COLLEGE ORCHESTRA.

leader we have managed to endure to the end. For the kindly encouragement with which our efforts have been received we are grateful, nor have the Students failed us in regard to pecuniary matters, but we feel that there is many a musician who, either on account of modesty or, more likely, lack of energy has "hid his light under a bushel." We are in great hopes that the incoming classes of the next college year, par-

By the gratifying results of the past year the class is looking forward to a strong team to compete in the inter-class series next year, and hope to bring home the trophy.

We shall also, in all probability, have a social meet in the nature of a banquet or snowshoe tramp, before saying farewell for the Summer.

W. P.

THE INTERCOLLEGIATE DEBATE.

Last year saw the first shaking of hands and the indulgence in friendly athletic rivalry between O. A. C., Guelph, and this college. The present year, in addition to the various athletic competitions, made a worthy introduction in the nature of an intercollegiate debate held in the Assembly Hall, on the evening of the 9th February. Dr. Harrison, our Principal, was in the chair, and eulogized the sentiments expressed by our artistic artists in their posters of this red-letter day event.

The question for debate was as follows:—Resolved "That the present Canadian tariff places the Canadian farmer at an economic disadvantage in comparison to all other industrial classes in Canada."

Macdonald took the affirmative, Guelph the negative. The former was supported by Messrs. Davis and Kennedy, the latter by Messrs. Latimer and Vining.

Mr. M. B. Davis, after introducing his subject, dealt specifically with the various industries, such as lumbering, fisheries, and wool, pointing out the proportionate degrees of support given each of these by the tariff. He then compared each of these to the agricultural industry,

and clearly demonstrated the disadvantageous and unfair position which this industry occupied with its consequent injustice to every individual engaged in its pursuit. Mr. L. H. Latimer, having treated us to a Shakespearian quotation which the result and verdict of the debate alone proved to be inapplicable, showed us the necessity for protection in this country, owing to the fact that Australian and New Zealand meat would otherwise enter our market and spoil the farmer's trade in this country.

Mr. R. S. Kennedy, in his customary

forceful manner, combated the arguments of the negative leader, and later further impressed his audience and the negative with an all-important points which his leader, Mr. Davis, had al-



THE MACDONALD TEAM—R. S. KENNEDY AND
M. B. DAVIS.

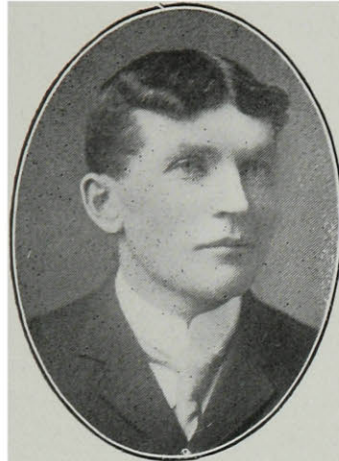
ready mentioned, namely that the question before the House was not one of protection against free trade, but a question of internal fair competition and taxation. That put a whole battery of the opposition out of action.

Mr. Vining concluded the argument for the negative by demonstrating the great prosperity of agriculture in Canada throughout all its branches, and thought it wise to leave well enough alone in view of such progress. His manner and ease

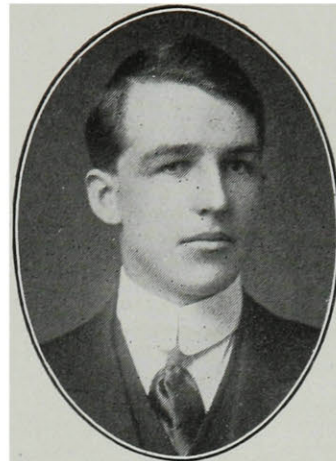
on the platform commanded the full attention of the audience.

In the rebuttal, Mr. Davis, brimful of righteous indignation, gave the opposition a "broadside" from his heavy guns.

We were very fortunate in securing as judges, Judge Laurendeau, Mr. Recorder Weir, and Mr. Fairburn. These gentle-



men, after due deliberation, gave judgment in favour of Macdonald, amidst



tumultuous hilarity.

The girls' quartette—Mrs. Crowell, the Misses Rollins, Lawrence, Tanner—gave us "Kentucky Babe," while the orchestra showed their

usual good taste and added zest to the evening's entertainment.

THE GUELPH TEAM—J. E. LATIMER AND R. L. VINIG.

WINTER AT COLLEGE.

Father Winter, good-bye! I hate to see you go.

I grieve to see the cracking ice, the melting of the snow.

In the Spring and Fall and Summer we may get the most work done,
But the jolly, frosty Winter is the time we have the fun.

Those three jolly fellows with lungs tough as bellows,
Who went skiing right to Montreal,
Went sliding and gliding, themselves rightly priding
Three hours and a half did it all.

Snowshoes crunching, sharp tracks punching in the sparkling crust of snow,
Out the laughing, stumbling, chaffing crowd of girls and fellows go;

Onward winding, nothing minding, till it grows too dark to roam,
But there's soon light when the moonlight leads the long procession home.

Gone the sweetest, gone the fleetest pleasure that the Winter gave.

Lo! Aurora's sunbeam borers pierce the Rink its watery grave.

All is done for; blame the sun for losing Hockey's glorious game;
Discontinued is the thing you'd willingly begin again.

You remember in December how you glided round the ice,
Safely clasping, without asking, that small hand you thought so nice;
Lightning skating not abating, out of shadows into lights,
Left was thinking, skates were clinking.
Thank you, Winter, for those nights.

R. S. KENNEDY.

THE MACDONALD COLLEGE LITERARY AND DEBATING SOCIETY.

Macdonald College Literary Society had many interesting events in the Fall term, but the zenith of her annual existence always comes in the months of February and March. Our president, Mr. J. G. Robertson, has ably managed the business of the Society, as the following remarks will vindicate. As the inter-class debating competition in the Faculty of Agriculture has now been completed, it may interest our readers to hear that the Seniors have worthily upheld their status. We are sure that if every year can find it self-possessed, in not only such quantity, but also in such quality of debating talent, the College will always hold its own against all comers. We welcome and congratulate the victors.

The draw was as follows:—Seniors vs. Juniors; Sophomores vs. Freshmen. The final between Seniors and Freshmen ended in favor of the Seniors.

Resolved; "That similar qualifications should be required of all immigrants into Canada, irrespective of color or race." So ran the question for debate in the final inter-class championship series, the competitors being the Senior and Freshman years. The former were represented by Messrs. Davis and Raymond, the latter by Messrs. Presley and Westbrooke.

Mr. M. B. Davis, in opening the debate, impressed the audience by his broad treatment of the subject. He spoke of the impracticability of denying to one subject what was given to another, that color was in many cases due to climatic conditions, many of the colored races being more nearly related to us than many of the other white races.

The making of the best Canadian nation, he continue, is to be brought about by getting the best from each and every race, and welding them into one interest and effort.

Mr. Presley, leader of the negative, attacked the point stated with regard to colored nations being a matter of climatic conditions, by saying that the negroes in the United States of America, who lived in the same climate as their white brothers, were as black as ever they had been. He blamed the free door of the United States of America for the low ebb of morality prevalent in certain sections of that country. Further, he finds no advantage by admitting Japs and Chinese who eat rice and would import it from their own country, thus making no increased market for our home-grown products. He terminated his address in the point that the foreigner will not stand by the colonies in time of need.

Mr. L. C. Raymond, seconding Mr. Davis' motion, drove home the main factors in a systematic and sound fashion. He spoke of the Hindoos and other nations, showing that the open door to all British subjects alike, whether the restriction be lenient or stringent, made possible the setting of a higher qualification, owing to the greater competition.

Mr. Westbrooke closed the negative side of the debate by stating that the foreigner undersells us on the Pacific coast. He also summed up the points for his side.

Mr. Davis made his usual pithy rebuttal.

While the judges, Messrs. Newman, Klinck and Barton, were in consultation with regard to the momentous decision, the girls' quartette, consisting of Mrs. Crowell, the Misses Rollins, Lawrence

and Tanner, furnished the musical part of the programme. Miss Read also made a good contribution to the evening's entertainment. The judges had by this time returned, and Prof. Klinck gave decision in favor of the Senior Year.

SECTIONS A AND C DEBATE.

The first of the series of inter-class debates in the School for Teachers was an interesting one, as an interesting question of to-day was under discussion. The subject was, Resolved: "That Nature Study is of greater educational value than the study of Latin and Greek."

Sections A and C were pitted against each other; Section C, represented by Miss E. Read and Mr. Lamb, upheld the affirmative, while Section A, represented by Miss M. Travers and Miss R. Reed, supported the negative.

Miss E. Read excelled in argument, and the points which she brought out so clearly gave weight to the affirmative side of the question.

Miss Travers spoke with her usual success. She referred to the vast amount of knowledge which has been handed down through Latin and Greek.

Mr. Lamb made several points, but probably the fact that culture, derived from Latin and Greek, lies in the thought and not in mere translation, was the best.

Miss R. Reed summed up the argument for the negative in such concise form, that the judges had some difficulty in judging the debate.

Mr. Edmison, who was chairman of the judges, gave verdict in favor of the affirmative.

The usual good musical programme was provided.

SECTIONS B AND D DEBATE.

Resolved: "That a bill to enforce compulsory education of Protestant children between the ages of seven to thirteen, in the Province of Quebec, is impracticable."

This was the second of the girls' inter-section debates, and took place in the Assembly Hall on the evening of March the first.

Miss Dresser and Miss Guiton supported the affirmative, Miss Price and Miss McConnell the negative.

Miss Dresser pointed out the great disadvantage of forcing people to educate their children, and cited as a case the fact that men would oppose a movement, whether they were in favor of it or not, provided that movement smacked of force and compulsion. She thought compulsion might be possible where education was free, but not so in Quebec where education is not free.

The leader of the negative, Miss Price, showed that farmers were financially in a position to pay; also, that if more went to school, higher salaries would be forthcoming for teachers, thus raising the status of the teaching profession, of which there is so much need in our rural schools at the present time. In closing, she called to her aid statements made by the leading educational men in the Province, predicting greater wealth to Quebec through the benefits of thorough school education.

The seconder of the affirmative pointed out the different political situation of Quebec to those countries or provinces where free education was current, and found it impracticable to adopt such a system, owing to wide religious differences and interests.

Miss McConnell closed the negative side in showing how money spent in school education was a good investment,

and that as the tax in Quebec was low there was no reason why the people should not make a direct contribution for the benefit of their children.

Miss Dresser, in her rebuttal, confuted some of the arguments of the opposition.

The judges were Dr. Brittain, Mr. Bates and Mr. Fraser, the Doctor giving the verdict in favor of the affirmative.

The male quartette amused us for a while, as did also Mr. R. S. Kennedy with a serious love tragedy.

MODEL B LITERARY SOCIETY.

A meeting of the Model "B" Literary Society was held on Dec. 11, 1911. The programme consisted of a paper on "Christmas Legends" by Miss McKercher, and the reading of a story by Miss M. Duval, entitled "The Other Wise Man." There were also several musical items; a piano solo by Miss Boisvert, a harmonica selection with piano accompaniment by Miss Lowry, and a duet by the Misses Embury and Cliff.

On Jan. 24, 1912, a debate was the chief item of the programme. The subject was, "Resolved that it is for the welfare of the state that women have equal voting privilege with men." The resolution was supported by the Misses Guiton and Murchison, while the negative was upheld by Miss C. Cowling and Miss E. Bradford. Mrs. Kneeland, Dr. Brittain and Dr. Lynde acted as judges. The decision was given in favor of the affirmative.

A piano duet was rendered by the Misses Embury and Cottingham, and a piano solo by Miss Goff.

M. F. T.

MODEL C LITERARY SOCIETY.

The last meeting of Model "C" Literary Society took the form of a

debate, the subject being, "Resolved, that Wordsworth is a greater poet than Tennyson." The affirmative was supported by Miss H. Wright and Miss Riddell, while the negative was upheld by Mr. Latham and Miss Partington. Miss Sinclair and Dr. Brittain, acting as judges, decided in favour of the affirmative.

We all hope that the next meeting will only prove as great a success.

F. M. N.

MCGILL UNDERGRADUATE ORCHESTRA CONCERT.

The McGill Undergraduate Orchestra assisted by the McGill Mandolin Club gave their first annual concert in the Assembly Hall on Saturday evening, March 23rd, and the College Literary Society, under whose auspices the concert was given, is to be congratulated upon its enterprise.

A well arranged programme accurately and beautifully rendered was much appreciated by a large audience. The music chosen was of the best, and when as encores such popular hits as "Oh, you beautiful Doll" and "Alexander's Rag-Time Band" were played, everybody seemed particularly delighted.

It was perhaps in the dance "In the Shadows" (Finck) and in the opening piece of the second part of the programme "Morning, Noon and Night in Vienna" (Suppe) that the orchestra accomplished its best work.

A duet for cornets "Woodland Whispers" (Losey), a trio (selected) by the violin, piano and 'cello, and a 'cello solo "Kol Nidrei" (Max Bruch) gave a little variety to the program and served to show the individual abilities of the members the orchestra.

The selections by the Mandolin Club were well played and thoroughly enjoyed.

Special mention must be made of the vocal part of the program. Mr. Theo. H. Lennie was heard in "Hail, King George," accompanied by the orchestra, and gave as an encore "I hear you calling me." Those of the audience who were present when Miss Fessenden sang in the Assembly Hall some three years ago were more than glad to welcome her again. She was in excellent voice and charmed her audience with (a) "Boat Song" (b) "April's Here." The popular duet "It was a Lover and His Lass" was sung by Miss Fessenden and Mr. Lennie.

The excellent work of all the artists was sustained right up to the last bar of "God Save the King," and it would be hard indeed to give too much praise to Mr. J. A. Smith, the conductor, and all who took part in the concert.

DR. PERRIN'S ORGAN RECITAL.

We have had the privilege of having with us lately Dr. H. C. Perrin, Director of the McGill Conservatorium of Music, who, assisted by some of his students, has given us three most enjoyable organ recitals in our college hall. For these we are especially grateful, as there is but little opportunity here of listening to good music, and of becoming acquainted with the compositions of great musicians. Each of these recitals has been attended by an audience of music lovers who have not failed to appreciate the talent and executive ability of the artists.

Dr. Perrin is indeed a master organist. His programmes included works of many of the most famous musicians together with some of his own compositions. At the first recital, Miss Eva Goldstein assisted Dr. Perrin with four charming songs, all well rendered. At the second recital, Miss Augusta Schmidt held her audience spellbound during the render-

ing of two violin selections, while Miss Evelyn Schmidt sang three vocal selections very acceptably. At the third recital, Mr. W. W. Marshall with his rich bass voice pleased his audience and won their very hearty applause. Miss Ethel Jamieson, violinist, played with great feeling and deserves high praise.

We wish through the columns of the Magazine to thank Dr. Perrin and those who have so kindly contributed to our pleasure in giving us these recitals. May the future bring them back to us again !

E.R.

CHOIR SOCIAL.

Through the kindness of the Ladies of the Union Church Guild, the Choir, together with a few extra gentlemen friends met and spent the evening of Friday, March 1st, at the home of Mrs. Wartman.

Soon after eight o'clock a procession of small groups of students with, of course, the chaperonage college regulations demand, wended its way to the appointed house of entertainment. Here the guests were received by Mesdames Muldrew and Wartman.

The clear floors might have suggested to some what form the entertainment was to take, and it was not long before Mrs. Lynde played the first of many dances which were thoroughly enjoyed. About 10:30 supper was served, and although this item is always an interesting one on any programme, this particular supper served under the excellent supervision of Mesdames Wartman, Lynde and Muldrew, and served by students, was perhaps the happiest event of the evening.

While the ladies were preparing for home the men provided entertainment in the way of choruses. Finally all joined in singing Auld Lang Syne, and

brought to an end one of those evenings which mean so much to the student both boy and girl, by allowing them to renew their acquaintance with home life and comforts in the midst of an otherwise studious existence.

Y. M. C. A.

Since our last issue the Y. M. C. A. has had a series of successful addresses from members of the staff here, as well as from visitors. Among the visitors were Dr. Fred. Kelly, of Montreal West; Mr. Chas. Bishop, travelling secretary for College Y. M. C. A.'s in Canada; Mr. D. J. Evans, provincial secretary for the Boy Scouts, and Mr. W. J. Holliday, general secretary of the Fairmount Y. M. C. A., Montreal. These addresses are well appreciated, there being always a good attendance.

Fortnightly, the Sunday evenings are made more enjoyable by the Fireside Song Service. These are always popular and well attended.

It is expected that some of the men here will be able to go to the Northfield Student Conference in June. Arrangements are also being made to broaden out the work of the Association so that next year it will include Bible study Classes.

E. A. L.

SOPHOMORE DOINGS.

The course in Public Speaking put on in the second year provides the practice and experience in platform speaking, which in other years is largely left to the voluntary efforts of the students. It is for this reason that Class '14 Literary Society has not been much before the students during the past term. The principal event has been a Public Speaking Competition in which several members participated. Our thanks are due to Dr. MacFarlane for the careful and thorough assistance in directing the work in Public Speaking.

Let a Soph. be asked on what occasion, during the year, did he enjoy himself most, and he is almost sure to reply, "On the night of our snowshoe tramp, of course." This tramp, which proved such an enjoyable affair, was held on Saturday evening, March 16th. Miss MacMillan, with Prof. and Mrs. Klinck, made excellent chaperons, both during the tramp and at the Men's Residence, where refreshments were served on the return of the party. The brisk tramp over the fields and hills at the back of the College farm, the strenuous exhibitions of agility at the fences and on the snow banks, the excitement of having lost the chaperons, and the chat around the blazing hearth in the reception rooms, combined to make the evening a pleasant one.

The splendid performances of the Sophomore Base Ball and Basket Ball teams, which gained for them a place in the running for the championship, have been a source of gratification to the members of the year. That the trophy was lost was a disappointment, perhaps particularly to those who may not return to the College next year, but such would do well to remember that the Seniors have the advantage in longer experience, and to them should the honor naturally fall.

B. T. R.

UNE SOIREE FRANCAISE.

Me voilà pris entre deux alternatives: Celles de mentir ou de me féliciter moi-même! Je n'hésite pas et je choisis la dernière car si l'on me critique, au moins j'aurai la consolation d'avoir rempli mon devoir.

Voici donc de quoi il s'agit:—Nous avons donné, mardi le 26 mars, une soirée française dans la Salle d'Assemblée du Collège. Le programme: Une scène du "Malade Imaginaire," de

Molière, deux scènes des "Femmes Savantes," aussi de Molière, et une comédie en un acte, de Grenet Dancourt, intitulée: "Le Phoque." Le tout assaisonné de musique, de déclamation et de chant.

Voilà ce qui a causé les louanges et les félicitations de nos amis de langue anglaise. C'est égal, quoique je sois moi-même un des organisateurs de cette soirée, j'avoue que nous avons mérité des félicitations, et, au nom de tous ceux et celles qui, avec moi ont contribué au succès de cette soirée, j'accepte ces marques d'intérêt et ces félicitations par amour pour notre belle langue française d'abord, puis comme un dédommagement des peines et des fatigues que nous nous sommes données. Quant au mérite de chacun, je ne crois pas offenser personne en disant qu'il est le même pour tous. Nous nous sommes unis de coeur et d'intention pour faire un succès de cette petite soirée et chacun de nous mérite une part égale des louanges.

E. N. S.

DOING MY UNCLE.

Amongst the many interesting events which have crowded this year's literary programmes, there has been none more captivating than the play, "Doing My Uncle," which was duly staged and acted under the auspices of the Macdonald College Literary and Debating Society, in the Assembly Hall on the evening of March 30th.

The characters were as follows:

Timothy Crusty, Esq.,

J. G. Robertson, Ag. '12.

Chas. Hopeful (his nephew),

F. N. Savoie, Ag. '13.

Mrs. Jessie Hopeful,

Miss I. Robertson, H.Sc. '12.

Jack Symmons,

D. B. Flewelling, Ag. '12.

Susan Tuckett,

Miss M. Travers, T. '12.

Grimy (maid of all work),

Miss B. Brigham, H. Sc. '12.

The play is a broad farce, opening with Mr. Chas. Hopeful and Mrs. Jessie Hopeful, who may be considered as belonging to the Micawber class, in that they were always waiting for something to turn up. The plot consists in these Hopefuls, assisted by subsidiary hopefals in the characters of Jack Symmons and Susan Tuckett, weaving into their web such a poor old bluebottle as brandy-gouty Timothy Crusty, who is rich uncle to the unfortunate Charles. Grimy, who is maid of all work, is also made of all conspiracy in the plot. All the players deserve a good work. Miss Robertson showed excellent taste, and knew the advice of Hamlet to his players, "You must acquire and beget a temperance that may give it smoothness." F. N. Savoie displayed his usual alacrity. Miss Travers, the nonpareil dignified dame; D. B. Flewelling, the indispensable comic, who cuts more than one figure; J. G. Robertson filled the role of "Crusty," who has as much grit as the president of our Literary and Debating Society. Miss Brigham we leave to the last for emphasis. In her part she was never for a minute Miss Brigham, but from first to last the indescribable "Grimy." To Dr. MacFarlane, for his valuable assistance, as well as B. T. Reid, stage manager, the audience owes a debt of gratitude.

Faculty Items.

SNOWSHOE CLUB.



At a meeting of the Snowshoe Club, held in the Faculty Room on the evening of March 25th, the business of the Club was concluded for the year. The Treasurer announced a substantial surplus, notwithstanding the fact that the cost of refreshments for the past season had been borne by the Club instead of by the individual members who invited the Club to their homes as was the custom in former years. The Monday evening tramps have been unusually well attended throughout the entire season; and the social hour spent at the conclusion of each tramp has been even more largely attended.

MACDONALD COLLEGE CLUB.

"Reminiscences of Early Days at Macdonald College" was the subject of the February meeting of the Club. This meeting was given over to the pioneers in the work at Macdonald College and most worthily did they acquit themselves. For nearly three hours those who had been connected with the Institution during construction days sustained the unflagging interest of the audience. Reminiscence after reminiscence was given in which men and events of those times were graphically portrayed. Story after story was told describing conditions that obtained at Ste. Anne and vicinity during the initial stages of construction work. Those who had recently joined the staff counted themselves fortunate to have entered so easily into the labors of the pioneers, and while not wishing a recurrence of the experience, counted themselves fortunate to have had the opportunity of becoming so intimately acquainted with so many of the details incident to the erecting and

equipping of such an Institution. The whole souled feeling of oneness which characterized the meeting was an evidence of the growing spirit of good-fellowship among the members, the fostering of which is one of the objects of the organization.

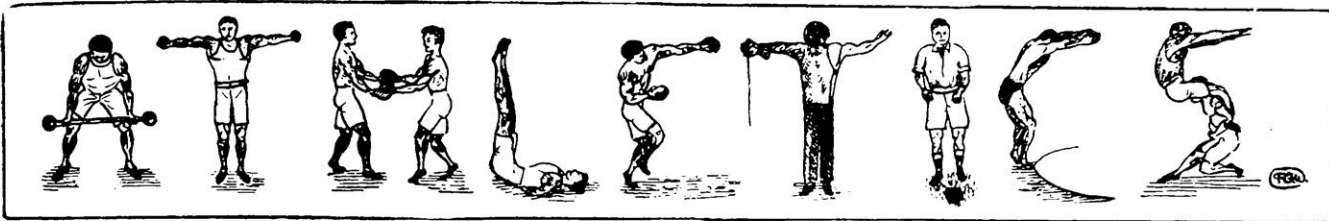
Under the auspices of the Club a social evening was spent at the home of Mr. and Mrs. Fixter shortly before their return to Ottawa. As Superintendent of the Farm Department for the past five years, Mr. Fixter has rendered the College splendid service. In his enlarged field of usefulness, as a member of the staff on the Committee of Lands in the Commission of Conservation, his many friends wish him continued success.

On the evening of March 23rd, at the invitation of the Union Literary Society, the members of the Club attended the entertainment given by the McGill Glee and Mandolin Club, in the Assembly Hall, where a splendid programme of instrumental and vocal music was rendered.

RECREATION CLUB.

The members of this Club have not been too busy to enjoy one or two hours a week at one sort of sport or another. Hockey and Baseball have been the chief sources of recreation, the players of each game meeting once a week for practice during the season. In Hockey several games have been played resulting in wins and losses both of which were thoroughly enjoyed by the Club. In Baseball no matches have been played but throughout the season the members have shown enthusiasm by turning out to the weekly practices in large numbers; and had the opportunity to play any matches presented itself, this Club would no doubt have acquitted itself creditably.

D.S.K.



ONCE again we have to sum up the results of a successful year in the realm of Athletics. Many of us are on the last lap of our course at Macdonald, and while we feel loathe to leave it and its many pleasant associations, we feel that each and every man has given of his best freely, as opportunity offered, to defend the name of Macdonald as well as set new standards for those who will follow in our wake. The value of athletics and the Athletic Association to each of us does not need reiterating here, but through its possibilities we will often look back upon some of the most pleasant features of our residence life at Macdonald.

We can look back with satisfaction on the year's work, and we cannot mistake several outstanding features, such as our Annual Field Day, the good performances of our men on the McGill Track Team, the excellent Basket Ball team, and the success of the Hockey team.

This brings us to the Guelph-Macdonald series, and this year we were the hosts, instead of the guests, as last year. While we were somewhat disappointed with the results of the base ball and basket ball games, we were proportionately pleased at winning in hockey, which was their strong feature, and which we were influenced to believe was

their sure game. While our boys were not in their best form on the day of the basket ball game, yet their apparent over-anxiety seemed to throw them out of "kilter," and although we lost we still maintain we have the better team. We say this because of the showing that our team



VAUGHAN CUP.

PETERSON CUP.

WON THIS YEAR BY THE SENIORS.

has made against McGill and much stronger teams than O. A. C. and we feel that our boys did not do themselves justice.

The series we hope proved as satisfactory to O. A. C. as it did to us, and we trust that they enjoyed their short visit here as much as we did our visit to Guelph last year.

The Senior Year has again won the "Robertson" shield for indoor sports, and we congratulate them on their success which is a fitting reward for their consistent work in athletics since entering Macdonald four years ago.

The Inter-Class Hockey schedule was not played, owing to the fact that the teams were not at all evenly balanced, five of the First College team belonging to the Sophomore Year; next year, however, we hope to see the schedule carried through.

other teams, as too much diversity of interests has been the cause of lack of enthusiasm in what should be our greatest and most fascinating game.

Although few games were played, the team has passed through another season without a defeat. It was very gratifying to students and players to win the Annual Championship game with O. A. C., and especially after the brilliant showing made by Guelph in the O. H. A. this season, finishing second in a field of some forty teams. "Archie" Campbell



FIRST HOCKEY TEAM.

HOCKEY.

Hockey at Macdonald this year was not on a much broader scale than in former years, in spite of the fact that from the available material an excellent well-balanced team was turned out, and which proved that it could hold its own against teams of much more pretentious colleges than our own. The reasons and the remedies may not be clear, but there is something in the suggestion that men who play hockey should not play on

acted as manager this season, and our praise is due to him for the excellent judgment shown all through.

One of the pleasant trips away was the Huntingdon-Ormstown trip. We met and defeated the teams of both towns, and in the latter place rolled up a big score.

The Huntingdon boys played us a return game a week later, and though our team was not in form, we won out in a comparatively easy manner.

The game in Montreal against the Montreal Rolling Mills Co. team was rather a poor exhibition of hockey, and was won by the College team in a listless manner by the score of 2-0.

The Recreation Club team also crossed sticks with the College team and came out second best, although the College team was not at full strength.

point, as more team play was in evidence, and both teams worked their hardest to gain the advantage. O. A. C. made their best showing in the opening minutes of the match, and before our boys had got settled down, MacDonald drew first blood for Guelph on a long drive from the side which found the net. This seemed to have the desired effect on our



THE GUELPH VISITORS.

THE O. A. C.—M. A. C. GAME.

Hockey being the first game of the series of four events to be contested, a general feeling was evident that it would be somewhat of a test of the strength of the invading forces, and naturally excitement ran high when the whistle called the men to face each other.

The game started sharp on time, and was played in two periods, the first under O. H. A. rules, and the second under Quebec rules.

The first period was much the more interesting from the spectators' stand-

team, and they threw themselves into the game with a vim which soon showed they had struck their pace, and although the game became very fast our boys improved as it wore on, while Guelph seemed to have reached their limit. Finally Westgate intercepted a pass, and took the rubber unassisted into O. A. C. territory, and working his way in close on Hoffman beat him with a hot shot, thus tying the score—M. A. C. 1, O. A. C. 1. The period ended without any further scoring.

Macdonald came back strong and

determined, and soon put themselves in the lead by a nice shot from Rodden's stick. Clark was put off for two minutes for tripping, and with six men on the ice Guelph had their work cut out. Finally Young got possession of the disc, and passed to Rodden right at the mouth of the net, who slammed it past Hoffman for the third and what proved to be the last M. A. C. goal. Young and McElroy next got mixed up, with the result that Young was sent to the side for two minutes. After Young went off, O. A. C. made one last effort to stave off defeat, and was rewarded after hard work by Clark beating Oughtred for what proved to be the last goal of the match' M. A. C. 3, O. A. C. 2.

For Guelph the defence men were the strong part of the team, Hoffman in goal being largely responsible for the low score, while Herder was perhaps the best forward.

For Macdonald the defence was also strong, being at all times aggressive. Oughtred in goal was not called upon often, but did his work well. On the line Huestis and Rodden shared the honors.

Professor Barton and Mr. W. J. Squirrel (O. A. C.) handled the game most satisfactorily. The line up follows.

MACDONALD.		GUELPH.
Oughtred	Goal	Hoffman
Ross	Point	Kilgour
Westgate	C. Point	Kedey
Huestis	Rover	MacDonald
Rodden	Centre	Clark
Young	L. Wing	Herder
Ness	R. Wing	McElroy
Baker	Spare	

BASKET BALL.

In the fall issue we said we were proud of our basket ball team. To-day, with the season's results to look back upon,

we are prouder than ever, and Macdonald has in no indefinite way shown she can produce a basket ball team equal to any college team in Canada. In our enthusiasm over the team we entered the Senior League, in which is played the fastest ball in Canada. We are in the section with M. A. A. (Montreal), Y. M. C. A. Harriers (Montreal), and Central Y. M. C. A. (Ottawa). Although we do not expect to make a big showing in this league, yet it will serve the purpose of bringing our team in contact with stronger teams than could be encountered in any other league, and will drive many lessons home as to how the game should be played. We came out of some of the games with much the smaller end of the score, yet on different occasions the leaders had to extend themselves to stave off defeat.

The O. A. C.-M. A. C. game was no doubt the most exciting game ever played in the College Gym. Much better exhibitions of basket ball have been given but never was as much interest taken in the result. We started off with a good lead, and seemed to have much the better of the play, going off the floor at half time with a lead of six points. Both teams came back strong and fresh, but the over-anxiety to win seemed to disorganize the movements of our team, and there was not the usual amount of head work in evidence. O. A. C. took advantage of this, and pulled up gradually, and by good luck in shooting fouls the score was tied, and they finally went into the lead after some clever work by the "home" men. On the other hand, our boys were unfortunate in fouling O. A. C. and in connecting with the baskets, Walker being especially off color in contrast to his usual brilliant display. What looked like a sure victory up to within five minutes of the whistle ended in a

win for Guelph, with 26-20, thus giving them two out of three of the athletic events.

Montgomery (capt.) well deserves the credit he has been given for his consistent work, and he was always able to depend on each of his men for their best. Wilcox '14, Walker '15, Kennedy '12, and Campbell '12, with Cooke as spare, made a combination in which there was little choice, all showing marked improvement over last year's work. The second team

"finds" have been made, some of whom will eventually make the College team.

Large crowds were present at most of the games, and every year had its followers. The games in most cases were keenly contested, but the Sophs. proved stronger than the other teams, and went through the season without a defeat. Much interest was shown in the last game which was between the Seniors and Freshmen. The game was much closer



FIRST BASKET BALL TEAM.

has rendered valuable assistance in turning out to the practices, thus making it possible for the College team to keep in form, as well as preparing themselves to fill the vacancies that will occur on next year's first team.

INTER-YEAR BASKET BALL.

The inter-year basket ball games have been most interesting, and the keenest rivalry has existed between the four years, with the result that several

than the score would indicate, the checking being heavy and close throughout. The Freshmen had hard luck in locating the basket, while the Seniors appeared to be in good form.

League Standing.	Won.	Lost.
Sophomores.....	3	0
Seniors.....	2	1
Freshmen.....	1	2
Juniors.....	0	3

BASE BALL.

The College team has been unable to arrange matches with outside teams this year who are sufficiently strong to give us an interesting game, therefore the Guelph-Macdonald game was the first opportunity of seeing the team in action, although some few games had been played with the Recreation Club for practice. We were confident of winning this game on the showing the O. A. C.

tight infield and outfield supporting him that Baker had. Campbell (capt.) distinguished himself and held the ball in good shape as well as making good time on the bases. Our batters seemed to have an off day, and those balls which they did connect with were faultlessly fielded by the Guelph boys. The final result was 16-13 in favor of O. A. C. Messrs. Summerby and Squirrel handled the game satisfactorily.



FIRST BASEBALL TEAM.

boys were making, but whether it was over-confidence or over-anxiety, the players did not seem to realize the strength of the Guelph team and did not make the most of the opportunities presented. In spite of this, Macdonald stayed in the lead till the seventh inning, when Guelph took the lead and held it till the end, winning by the score of 16-13.

Brown pitched good ball, much better than the ball passed out by Baker, of Guelph, but Brown did not have the

INTER-YEAR BASE BALL.

Although base ball has lost some of its prestige, through basket ball being introduced as an inter-class game, yet the games were as interesting as ever, and some exciting and close games were played. The Seniors have always had a strong baseball team, but in the first schedule game the Sophomores tied the score, and each side was awarded an equal number of points. This game was a clue to what proved to be a close finish. In the Junior-Soph. game, the margin

was one run, the tie being broken only in the last half of the last inning. In the Soph.-Freshmen game, the margin was three runs. The Seniors had an easy time disposing of the Juniors and Freshmen in their respective games.

League Standing.	Won.	Lost.	Draw.
Seniors. . . .	2	0	1
Juniors. . . .	2	1	
Freshmen. . . .	1	2	
Sophomores.	0	2	1

THE RINK.

Another most successful skating season was brought to a close on March 13th. In spite of misunderstandings about the weather required for making ice, "Whylie" Baird and the weatherman finally came to an agreement, and by dint of hard work a fine sheet of ice awaited us on our return from the Christmas holidays. This was soon taken advantage of by all who could skate. In spite of numerous protests, the weather remained cold, but not sufficiently cold to quell the ardor of those who could enjoy the skating most. With the milder weather the crowds grew, and with the season the enthusiasm of everyone over the enjoyment to be had on the Rink. The chance for a social chat and the merry laughter of so many happy people, together with the effect of the invigorating bracing air, all told

on one when books were opened for the evening's work. Like all good things, however, it must come to an end, and this came quickly with the hot rays of the March sun. Everybody made it a point to be present for what was announced to be the "last skate." How those "last skates" were repeated, each time somewhat lengthened, would provide material for many pages; it is only sufficient to say, however, that this has been the most enjoyable skating season Macdonald has ever had.

The finances are in good shape in spite of the extra cost of making the ice this year, and of the cost of new sides for the Rink, which alone amounted to some fifty dollars.

The students take this opportunity of thanking the manager, Mr. Montgomery, and the secretary, Mr. Baird, for the unselfish way in which they have given their time and energy, so that we might have a rink of which any college might well be proud. We trust they will take this humble appreciation as an acknowledgment of their success.

The Rink Committee have expressed a wish that members of the staff, students and any others who contributed to the support of the committee, will accept this means of expressing their thanks for the kind assistances rendered from time to time.

R. J. W. '14.



Girls' Athletics.

BASKETBALL.



ON January 20th, the first and second R. V. C. Basketball teams came out to Macdonald to play our girls. Both games were good but the second team succeeded in making

Although our basket-ball teams were not successful in winning their games this year, we wish to congratulate them on the excellent showing they made and on the great interest and perseverance exhibited. The line up for the games was as follows:—



GIRLS' BASKETBALL TEAM.

the best showing, only losing by two baskets. The R. V. C. were the winners in both games, winning from first team by a score of 21 to 13, from second by 22 to 18.
The return matches were played in Montreal, on January 27th, R. V. C. again succeeded in winning both games by a score of 27 to 9, first team, and 14 to 7 from the second team. The result of these games leaves the trophy with the R. V. C. for another year.

R. V. C.		M. A. C.	
1st Team		1st Team	
B. Ross	} Home	A. Cauldwell	{
K. Laurence		M. Idler	
L. Manny	Centre	L. Young	
E. Oughtred	} Wing	V. Scott	{
B. McLaurin		L. Woodley	
V. Brown	} Defence	K. Hill	{
E. Chauvin		R. Reed	

R.V.C.		M. A. C.	
2nd Team		2nd Team	
M. Longworth	} Home	E. Read	{
R. Richards		B. Reichling	
F. MacSween	Centre	M. Tildon	
K. Wilder	} Wings	A. Duguid	{
V. Henery		M. Duval	
L. Ross	} Defence	A. Dilworth	{
I. McCaw		I. Riddell	

baseball. The game was a very exciting one from beginning to end. There was only time for six innings, the score at this time being in favor of the Baseball team.

Next week we hope to play against some old Macdonald Girls, who belong to the W.A.A.A. The game will be played in town. The line up will be as follows:—



GIRLS' BASEBALL TEAM.

Much praise is due to the worthy coach, Mr. Bates, for the way in which he handled the basket-ball teams this year.

BASEBALL.

The first real excitement we have had since we started playing baseball last September came in March, when the Basketball team offered to play us in

- L. Chadwick
- S. Runk
- L. Wright
- M. Upton
- F. Chisholm
- E. Gardner
- P. Partington
- B. McKell
- E. Smith

Although skating and other out-door sports have claimed our whole attention at times, Mr. Summerby, our coach, has been very patient and has given us many good practices.

M. S.

GYMNASIUM EXHIBITION.

Sixteen of the senior student teachers, accompanied by Miss Torrance, went into Montreal to take part in a gymna-

sium exhibition which was given in the High School Gymnasium by several classes, schools and colleges.

The excellent display made by the girls on this occasion does great credit both to themselves and the ability of our Physical Culture Instructor, Miss Torrance.

We wish to congratulate both teacher and students on making such a splendid showing for Macdonald.

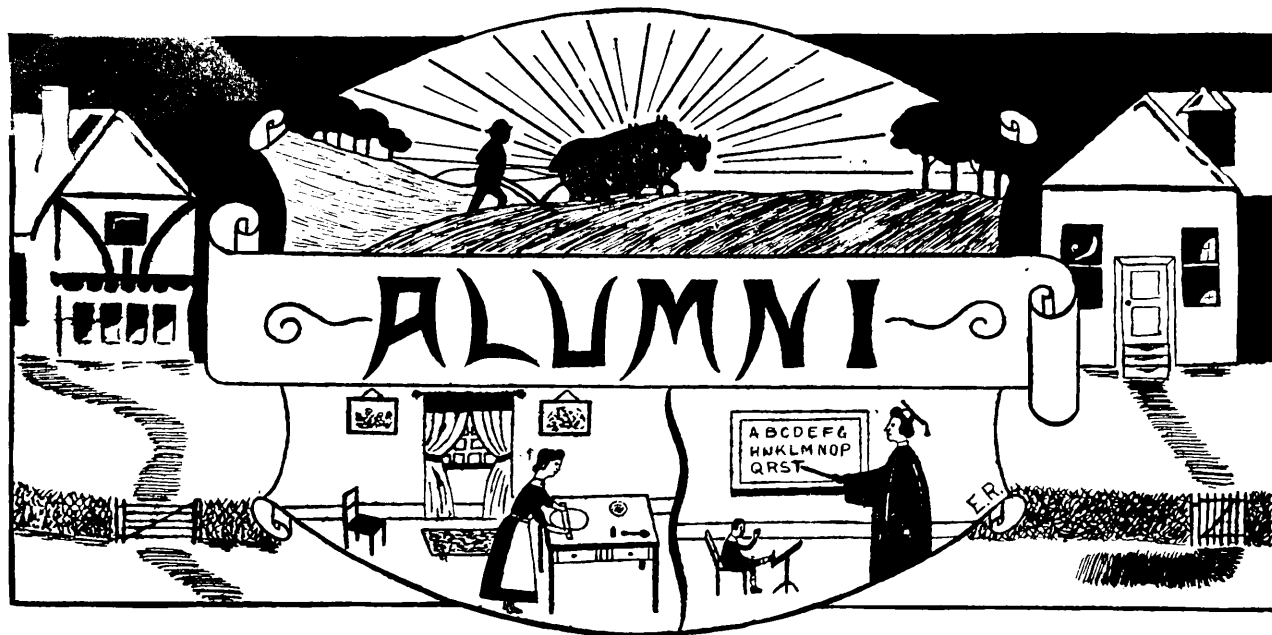


EXECUTIVE COMMITTEE—GIRLS' ATHLETIC ASSOCIATION.



HOROSCOPIST SERIES.

No. 3.—FUTURE OF THE B. S. A.



HOUSEHOLD SCIENCE.

Miss Beatrice Hurdman, Science '11, is doing settlement work in the Union Mission Settlement, Ottawa.

Miss Madeline Heward is spending the winter with her brother in Amherst, Nova Scotia.

A few words of greeting from—Elizabeth C. Macdonald, Tullochgorum, Science '10:

"It has been the privilege of those of us who are near the College to visit this great seat of learning from time to time. But how it thrills one at first to see strange girls in halls and rooms where we once seemed to be their true and rightful owners; this, however, passes off in time and we only wish the new comers every success and happiness.

"It is my earnest desire that the proposed reunion in 1915, of all the Science girls, may take our thoughts seriously so that we may plan to be all together once more. This, I think, could be all accomplished, although we are scattered far and wide.

"In closing I extend my heartiest greeting to one and all who are connected with our Alma Mater."

Miss Susie Hill, Science '11, who is now residing in Boston, Mass., visited the College March 10th and 11th.

Miss Georgie McQuarrie, of Prince Edward Island, and Miss Helen Christie, of Nova Scotia, who have been the guests of Miss Frieda Scarff, of Montreal, visited the College this past month.

Miss Jessie Macdonald, graduate of Science '09, is teaching school near her home in Tullochgorum, Que., and is doing credit to her Alma Mater

The Misses Edith and Mary Cairns, Science '11, visited the College last month.

Among the visitors to the Masquerade were the Misses Ada Colby, Greta Freeze, Bessie Stewart and Gertrude Philips, all graduates of Science '11, Homemakers class.

The marriage of Miss Alice M. Crutchfield to Mr. German Seeley, took place at her home in Boyd's Settlement, Quebec, on February 7th, 1912.

Miss Mable Westover, Science '08, taught school at Stanbridge East last year, but is at home this winter in Frelighsburg, Que.

Miss Mary T. Innes, Class President and Valedictorian of Science '10, of Nova Scotia, is now in Toronto, Ont., for some time.

Miss Irene M. Clerk, Science '10, of Westmount, has since graduation spent much of her time doing Settlement work. She will spend the Easter holidays in New York and Atlantic City, and expects to visit Europe later in the year.

Miss Annie Boyd has been studying music since leaving Macdonald and is at home in Russell, Ontario.

AGRICULTURE.

During the week end of the Guelph visitation, several of the old Macdonald students were to be seen helping to cheer us on to victory or console us in defeat. Among these may be mentioned J. E. McOuat, of Class '13, who has been spending the winter enlightening the minds of the youth of Three Rivers. In spite of his wide experience, having taught ten different nationalities, his old friends found him still the same old "Mac." He expects to return to Macdonald next year and proceed toward his B. S. A.

Mr. Robert Innes, B. S. A. of '11, has secured a position as superintendent of the fertilizer department of the Wm. Davies Co., Ltd., Toronto. He paid a flying visit to his Alma Mater in January to the great delight of his friends.

P. F. Funcheon of Class '12 is at home on his farm where he has been making many improvements, as all good Macdonald men do. He was present at the masquerade to which he made a pleasing and substantial addition.

F. E. Buck, B. S. A. of '11, formerly assistant to Mr. Macoun, now has charge of the Arboretum at the Central

Experimental Farm. We wish him all success and feel sure that he will carry on the work as satisfactorily as he did in the many college organizations with which he was connected.

W. H. Stewart, known as the first married man of Class '13, is carrying on a dairy farm at his home, Aylmer, Que. We extend our best wishes to him and his family.

Jas. Boden, of Class '12, has charge of the fine herd of Holsteins on Dr. Harwood's farm at Vaudreuil. The herd is certainly a good one, and Boden deserves to be congratulated.

TEACHERS.

Miss H. Moss is teaching in the William Lunn School, Montreal.

Miss C. BROWN, '09, is Physical Director of St. Lambert High School.

Miss PROUTY '08 is in charge of the model grades at Cowansville Academy.

Miss M. TAYLOR is teaching in the rural school at Free Port.

Miss L. SMITH and Miss R. EWAN are teaching in the Lunn School.

Miss M. MILLS, Elementary Class '10, is going to take the Model Course next year. We are also expecting Miss May Templeton, Elem. '11, to be here next year.

Miss WISHARD, '08, is teaching in the William Lunn School.

The following girls enjoyed the Bal Masque again this year:—R. Vipond, M. Boa, M. Allan, Francis Rittenhouse, F. Caldwell, D. Petts, E. Nellis, E. Blomeley, E. Travers, R. Hyslop, M. Parmelee, and others.

Miss G. PYE is teaching at Durham Academy.



Review of New Books.

Student's Series.

HOW TO PLAY INDOOR GAMES.

By Hen. Bee. Durost.

"Fighting Beecher" who, from old age, has been forced to desist from taking an active part in the indoor games for which he used to be famed, has been persuaded to give us a few hints as to the methods he adopted in preparing for and winning some of his hardest contests. Perhaps the most interesting factor, because of its novelty, and the one on which he lays most stress, is his Elastic Brain Protector. Beech holds that it is this talisman he has to thank for pulling him through many crucial moments; that it is this curious elastic band which has kept him cool and collected when, had he been without it, his appearance would have been ragged, ruffled and patchy.

* * *

THE AUTOBIOGRAPHY OF A HUMORIST.

By Doc. Robertson.

It is hardly necessary to say anything in praise of this book. The very title in connection with the author's name is humorous and an advertisement in itself, every resident at or near the college having heard at least one of his jokes. Doc's

jokes have always been in a class of their own, and his ponderous humour has always caused laughter. This little pamphlet gives many excellent examples of the brilliant repartee which has made him so admired with awe by the fair sex.

* * *

THE GENTLE ART OF FUSSING.

By "Texas."

This brilliant new author with his or her catchy "nom de plume" has evidently solved the problem which for generations has puzzled all freshmen. Any person interested in that curious verb "to fuss" should certainly read this book in which they will find the mysteries of the art clearly and concisely explained.

* * *

HOW TO BE HAPPY, THOUGH MARRIED.

By McClintock.

The author employs the solid and convincing arguments he has always been famous for in proving that this is really possible. He uses the best of examples when his modesty admits that he has so far satisfied himself of its possibility that he intends trying. We feel sure that all his readers will be persuaded to do likewise.

THE VIOLIN AS A HOBBY.

By Derrick.

This eminent musician has in a few of his spare moments jotted down some of the benefits he has derived from his hobby. It is unnecessary to say what a shining light he has proved himself to be in the world of music, most Macdonald Students having heard or at least seen him play. It is sufficient to say that any words from his pen will be as greatly valued and cherished as the strains from his violin.

* * *

Mr. Jull—"For feeding chicks we boil eggs hard and then grind them, shell and all.

Kennedy—(Not paying attention)—
"Which do you do first? Grind them?"

* * *

The class having been reading about the King's family the teacher wished to inculcate the correct idea of Royal descent so asked—

"Now, children, if the king's queen had a son, what would he be?"

"The Jack" was the quick response.

* * *



GIRLS' BASE BALL.

Catcher: "Bring it here, Lil! Bring it here quick!"

"Don't try to throw it!"

Mrs. Muldrew—"I understand you had company last night?"

Miss C.—"Well, yes, my aunt came out from Montreal to see me.

Mrs. Muldrew—"When she next calls tell her not to leave her tobacco pouch and matches on the piano."

* * *

(At orchestra practice) Derrick—
(vainly searching) "Say! I've no chin rest."

Williamson—(pointedly) "So we've always noticed."

McGill Medicine—"Why did you break your engagement with that Macdonald teacher?"

McGill Arts—"Why if I didn't go out there every Sat. she expected me to send a written excuse signed by my mother.

* * *

Dr. Snell—"In a reversible reaction the salt is continually being ionized, and the ions combine again.

McClintock—"Then, sir, you have discovered perpetual motion."

AT THE END OF THE HOLIDAYS.

He—"Where are you going off to?"

She—"Macdonald"

He—"Oh, do you go to that pie foundry too?"

* * *

Mr. Jull—"Will you make up a ration for laying hens from corn, wheat and beef scrap?"

Baird—"Just for one hen, sir?"

* * *

Aggie—"Helen, what are you doing?"

Helen—(who had been engaged in looking through the key hole) "Why, I'm only playing house mother."

* * *

Miss Ch-wick—(Sitting next Bookey at breakfast) "What is that curious overpowering smell?"

H-nd—"I don't know, but Bookey was at an Onion and Garlic feed with the Swedes last night."

* * *

Brown—(Thinking of the very few more happy days at Macdonald) "I wonder if I dressed myself up, could I come back and take a Science Course?"

Archie—"No, but they would let you in as a teacher with very little disguising."

* * *

Williamson—"Well, I think the teachers are prettier than the Science girls."

Baily—"The teachers may be pretty but all the Science girls have Harrison Fisher heads."

* * *

Dr. Br-t-n—"Where do you get carbon?"

Miss J.—"In our food."

Dr. Br-t-n—"How often is that?"

Miss J.—"Why every time we eat sir"

Dr. Br-t-n—"And would you not like to tell me how often er—that is?"

(Miss J. will never bring candy into lectures again.)

ODE OF LOVE.

My love is like the red red rose,

In June that's newly born,

And oh!—the pins around her waist

Are strangely like a thorn.

* * *

Miss Hill—"What is formed in the hydrolysis of soap?"

Miss Ch—lm.—"Suds."

* * *

Hart—(skating with a recently introduced Miss Mcl—d) "How is Doc? I heard he was suffering with a pain in his chest after last Saturday evening."

Miss Mcl—d—(in tone of injured innocence) "I think you are making a mistake—I am a teacher, not a Short Course Mcl—d."

* * *

Teacher—"And how was iron discovered?"

Dayschool child—"I heard father say they smelt it."

* * *

OH, MY YOUNG FRIENDS, DO BE CAREFUL!

Guileless Aggie—(offering his arm for the Grand March at the Masquerade) "May I offer you my arm?"

Girl Student—(Who has recently been given an insight into the wickedness of men students) "No, you don't." Wipes with handkerchief spot which proffered limb had touched.

* * *

Mr. H-mm-nd.—"Can you men give any reason for coming in 15 minutes late?"

W-tg-te—"Please, sir, there was the whole tribe of teachers coming down stairs and we had to wait till they had passed." (Laughter).

Mr. H-mm-nd—(smiling) "That rather reminds me of the excuse Adam gave."

SOPHOMORE BACTERIOLOGY.

Mac-al—"What kind of growth is this on my plate, sir? I left it open for 5 minutes in my bedroom."

Mr. Van-k—"Vat! You had better go and take a shower, and vash out your room wiv disinfectant."

* * *

Teacher (in town)—"What is another name for the land of Canaan."

Tommy—"The land of cream and sugar, please."

* * *

DEDICATED TO ALL FUSSERS WHO INTEND CALLING ON MA.

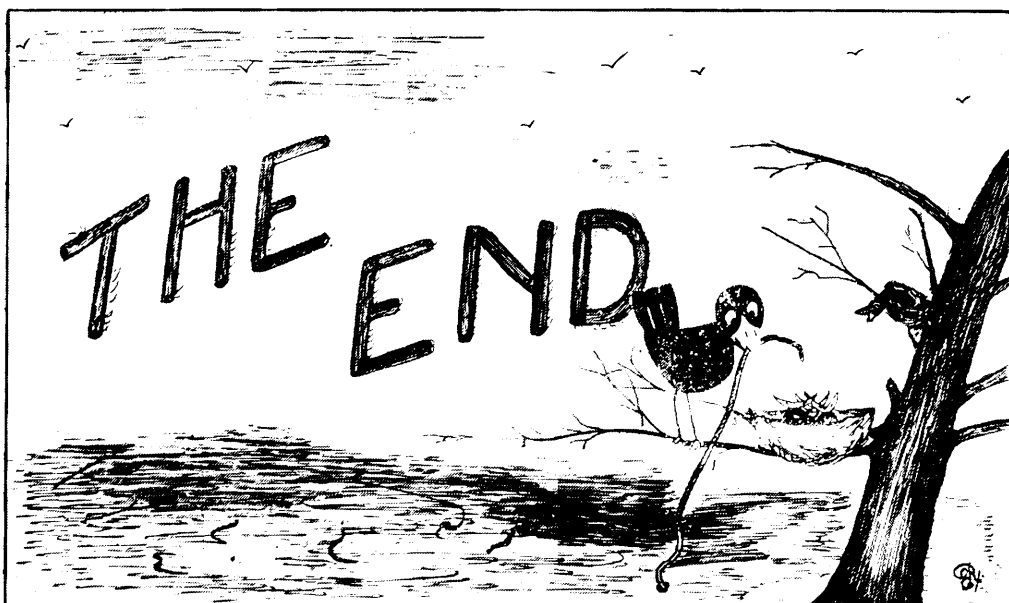
You sing a little song or two,
And have a little chat;
You make a little candy fudge,
And then you take your hat;
You hold her hand and say good-night

As sweetly as you can;
Ain't that an awful evening,
For a great big healthy man?

* * *

There are metres iambic,
And metres trochaic,
And metres in musical tone,
But the metre
That's sweeter
And neater,
Completer,
Is to meet 'er by moonlight alone.

Ex.

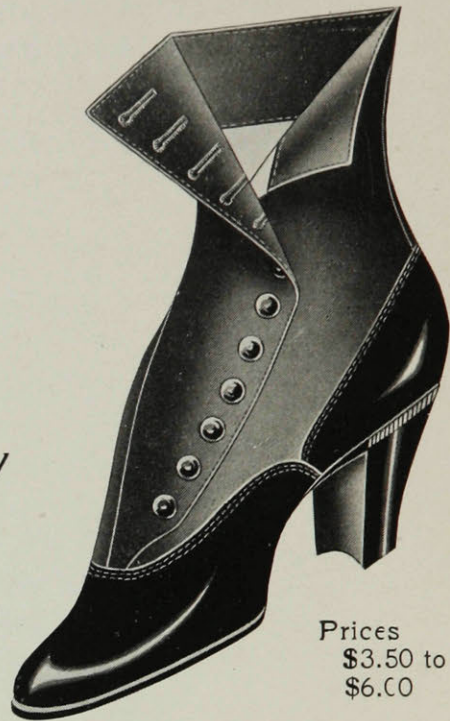




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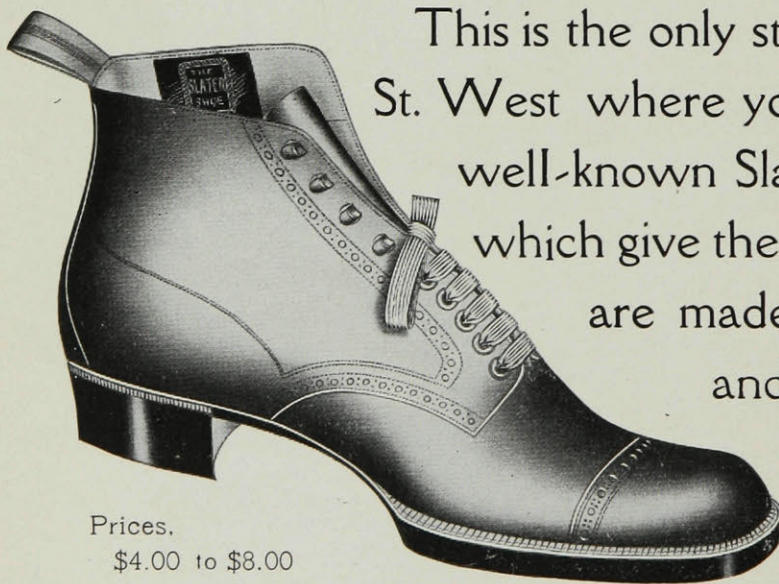
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